

brother®

SUPER POWERNOTE

PN-8500MDS



OWNER'S MANUAL

ENGLISH

Congratulations!

Thank you for choosing Brother's Super PowerNote! This machine is designed to deliver years of reliable operation. Please read this manual carefully and keep it in a safe place for future reference. We recommend that you write the unit's model number and serial number in the blank space below. These numbers can be found on the rear panel of the Super PowerNote.

MODEL No.:	SERIAL No.:
------------	-------------

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1. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
 - Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help.
2. This equipment has been certified to comply with FCC standards, which are applied to the U.S.A. only. A shielded interface cable should be used according to FCC 15.27 (c).
3. Changes or modifications not expressly approved by Brother Industries, Ltd. could void the user's authority to operate the equipment.

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Optional Accessories for Your Super PowerNote

You may want to consider some of the accessories described below for your Super PowerNote.

Diskettes (MFD-80) <<U.S.A. only>>

A box of ten 3.5" high density (2HD) Diskettes.

Data Modem (MO-700) <<U.S.A. only>>

The 2400BPS Data Modem allows you to communicate with a unit at another location via the telephone line.

Rechargeable Ni-Cd Battery (BA-4000)

This battery is used to provide power to the unit when no AC power is available. (For use outdoors, on a train, etc.) This battery pack fits easily into a compartment on the top of your unit.

Carrying Case (CA-4000)

This carrying case, with handle, is used to transport your Super PowerNote safely.

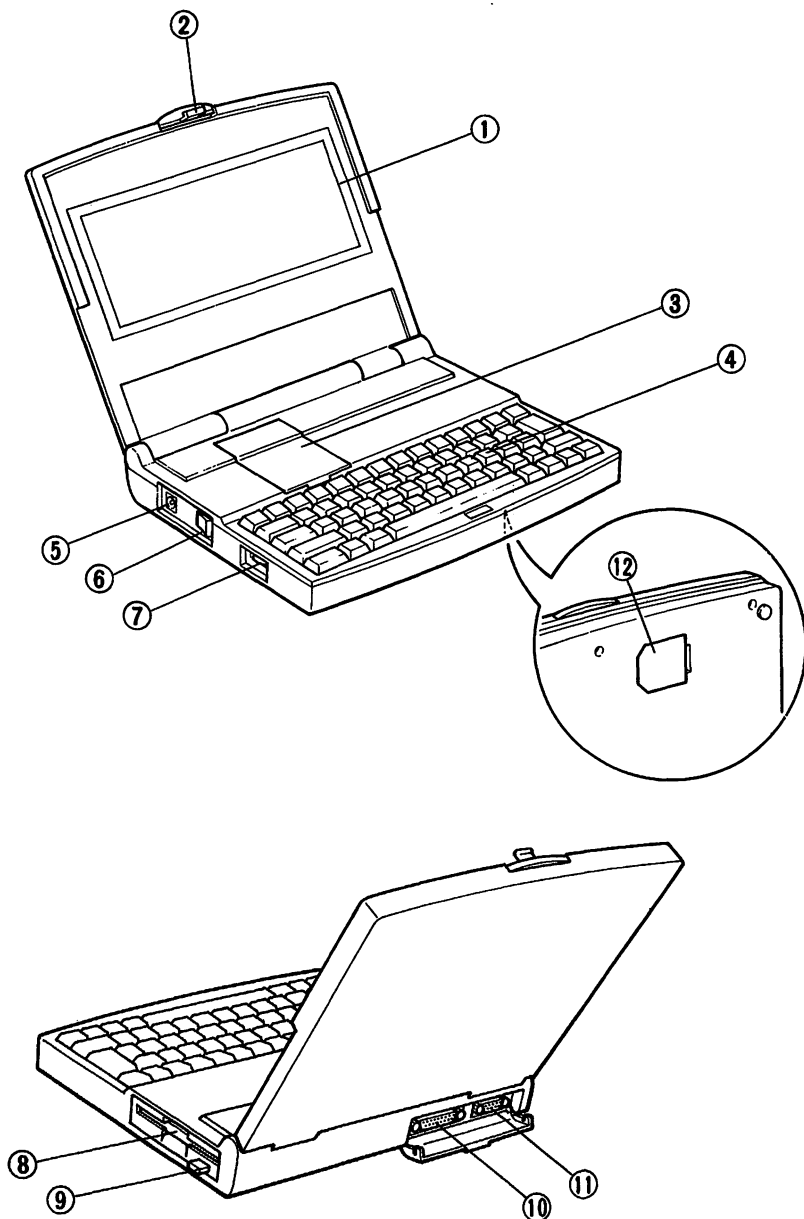
Getting Started

Precautions

- *Never power the machine with an AC adapter other than the AC adapter which comes with your machine.*
- *In case of malfunction, overheating, or other problems, immediately turn the power off, disconnect the AC adapter and consult your dealer. Turn the power off and disconnect the AC adapter during thunderstorms. Do not attempt to disassemble the machine. It has no user-serviceable parts inside.*
- *Do not tug on the power cord or connection cables. To disconnect, be sure to always grasp the plug itself. Avoid direct exposure to sunlight and other sources of heat. Be especially careful not to leave the machine in an automobile exposed to direct sunlight. The display is vulnerable to high temperature.*
- *Avoid spills. If any liquid enters the machine, immediately turn the power off, disconnect the AC adapter and consult your dealer. Do not allow foreign matter to enter the interior of the unit or get between the keys. Be especially careful of metal objects.*
- *Use the unit on a horizontal, hard surface. Avoid locations subject to excessive vibration, moisture or dust. The display is especially vulnerable to humidity and can be easily damaged if it is hit or scratched with hard objects. Never apply undue pressure on the display. Clean with a soft, dry cloth. Avoid using chemicals, solvents and detergents. Do not use sprays in the vicinity of the machine. Aerosols are extremely harmful to the disk drive.*
- *Avoid dropping the machine and do not place objects on the keyboard.*
- *To avoid interference, do not place the machine too close to a radio receiver or television. If the machine is too close to a television set, the disk drive may not work properly.*
- *If you switch the machine off, wait at least 10 seconds before switching it on again. Failure to respect this delay may disrupt the start-up sequence, resulting in faulty operation and possible hardware damage.*
- *Rechargeable Battery: Do not try to disassemble and do not dispose of the battery in a fire. The battery may burst. Avoid short circuits between the battery terminal and recharge at least once a year even if the battery is not used. For more details, see "Precautions Regarding the Rechargeable Battery" on page 7.*

IMPORTANT: *It is a good habit to save every text file to diskette after a work session. Failure to save your file to diskette before using a disk application function or the convert function will cause you to lose your text file. Since these programs use the entire memory, all text files in internal memory must be saved to diskette before the programs can be accessed.*

Description of the Machine



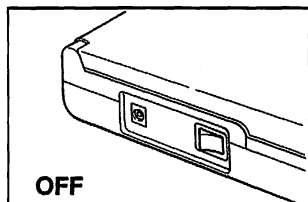
- | | | |
|---|---|--|
| ① | LCD Display | This LCD screen displays 22 lines of 80 characters. Contrast can be adjusted. |
| ② | Cover Clamp | Press the clamp inward to open. |
| ③ | Rechargeable Battery Compartment | Insert the optional rechargeable battery here. This battery allows you to use the machine where AC power is not available. |
| ④ | Keyboard | Character and function keys. |
| ⑤ | Power Input | Connect the AC adapter supplied with your machine here. Never connect another adapter. |
| ⑥ | Power Switch | Turns the machine on/off. |
| ⑦ | Contrast Controller | Controls the display contrast. |
| ⑧ | Disk Drive | Insert your diskettes here. |
| ⑨ | Disk Eject Button | Press this button to eject the diskette. |
| ⑩ | Printer Connector | Connect a parallel printer cable here. |
| ⑪ | Communication Connector | This input/output connector is used to connect a serial printer cable or a modem. |
| ⑫ | Backup Battery Compartment | The small lithium battery protects the memory even when the power is switched off. |

Setting Up

Connecting the AC Adapter

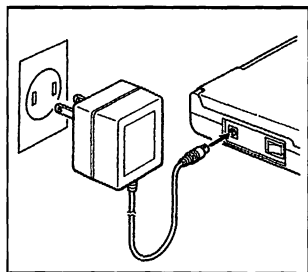
- Before connecting or disconnecting the AC adapter, make sure that the power is off. Connecting or disconnecting the AC adapter while the power is on may damage the memory.
- Never use an AC adapter other than the one which comes with the machine.

Make sure that the power switch is set to OFF.



Plug the supplied AC adapter into an AC outlet and plug its cable into the DC9V power input of the machine.

You may now turn the power ON.

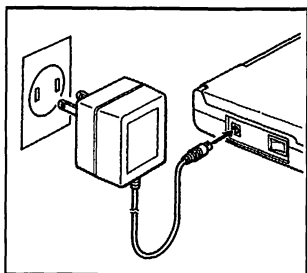


It is a good idea to disconnect the AC plug when the machine is not being used.
Always disconnect the adapter from the AC outlet during thunderstorms.

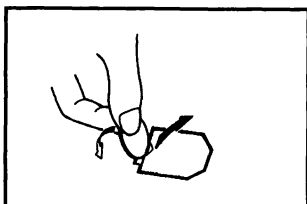
Inserting the Lithium Battery

The small lithium battery that comes with the machine should be inserted in the compartment on the bottom of the machine. This battery retains memory and powers the clock functions when the power switch is turned off.

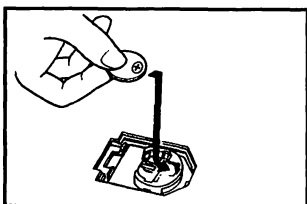
- *This battery is not for using your unit without the AC power adaptor. If you want to use your unit where AC power is not available, see "Installing a Rechargeable Battery" on page 6.*
- *When installing a new lithium battery, make sure that the power is on. Installing a new lithium battery while the power is off may cause malfunction when you turn the power on. Making sure that the power is on when you replace the lithium battery also prevents memory data that cannot be stored on diskette (e.g. settings of the Communication mode, etc.) from being erased.*



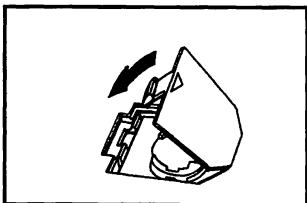
Connect the AC adapter and make sure that the power is on.



Use a coin to open the battery compartment cover on the bottom of the machine.



Make sure that the positive terminal (+) is facing outside. Slide the battery into the holder and push it in.



Close the cover.

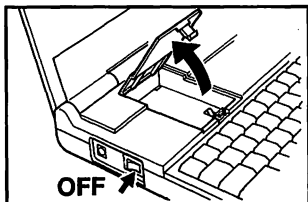
The battery will last for about one year. When it becomes low, a MemLoss indicator will appear at the upper-right corner of the screen each time you press a key, and the Auto Power Off function will be disabled.

When this indicator appears, you should immediately save all your files on a diskette. If you do not, there is a risk that the files will be deleted.

Bring the old lithium battery to your supplier and be sure to purchase a new battery of the same type (CR2032). Insert the new battery as explained above.

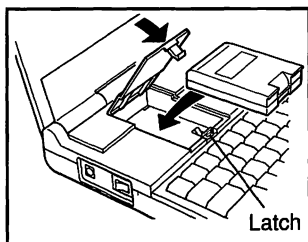
Installing a Rechargeable Battery

An optional rechargeable nickel-cadmium battery is available (Brother Battery Pack BA4000). It allows you to use your machine where AC power is not available.



Make sure that the power is turned off.

Open the battery compartment cover on the top of the machine.



Insert the battery as shown and press down to lock. Close the cover. You may now turn the power on.

To remove the battery, pull the latch toward the keyboard to unlock. The battery can then be removed.

Charging the Rechargeable Battery

A new battery must be charged before you can use the machine without the AC adapter.

To charge the battery, turn the power off, insert the battery pack, and connect the AC adapter. When the AC adapter is connected, the battery recharges automatically in about 15 hours regardless of the position of the power switch. However, if you use the quick charge function (see "The Quick Charge Function" on page 317), the battery will recharge in about six hours. The charging times indicated here may vary depending on the temperature and AC voltage.

- ***If the BATTERY indicator stays on for more than ten minutes without interruption, the battery is worn out and must be replaced with a new one.***

A charged battery will automatically power the machine each time you turn the power on while the AC adapter is not connected.

A new, fully charged battery will be able to supply power for about eight hours (at room temperature and when the disk drive is not used). As the battery becomes old, the time it can supply power after being fully charged will decrease.

When the battery becomes low, the BATTERY indicator appears each time you press a key. At that time, the battery does not have enough energy to power the disk drive and disk access becomes impossible. You should recharge the battery immediately. If an AC outlet is not available, or if you do not have the AC adapter handy, switch the power off and stop using the machine until you can recharge the battery. Failure to

observe this precaution can cause the memory to be cleared.

IMPORTANT: *When using the adapter with a rechargeable battery installed, never disconnect the adapter from the AC outlet or from the machine while the power is on. This would cut the power supply to the unit even if the battery is charged. Moreover, doing so could damage the memory. If you want to disconnect the AC adapter and run the machine with the rechargeable battery, switch the power off first, disconnect the AC adapter, and switch the power on.*

Precautions Regarding the Rechargeable Battery

- If you are going to use the machine for an extended period with the AC adapter only, remove the nickel-cadmium battery and store it in a cool, dry place. This also applies when you are not going to use the machine for an extended period. Be careful to prevent the battery terminals from contacting metallic pieces (do not wrap the battery in aluminum foil which would cause a short circuit). Recharge at least once a year even if the battery has not been used.
- Never recharge the battery using a recharger other than the built-in recharger of your machine.
- Do not try to disassemble the battery, or dispose of it in a fire. The battery may burst.
- Switch the power off when you do not use the machine in order to save battery energy.

Transporting the Machine

This laptop machine is ideal to work on a train or in a park, to take notes in a meeting, etc. Make sure that the rechargeable battery is fully charged and the diskettes that you might need have been initialized for use. (When the machine runs on the battery, avoiding too much disk operation will extend the battery life.)

- *Avoid transporting the machine with a diskette inserted in the drive. Vibrations and shocks may damage the diskette and the drive, and the diskette may fall out if the eject button is accidentally pressed.*

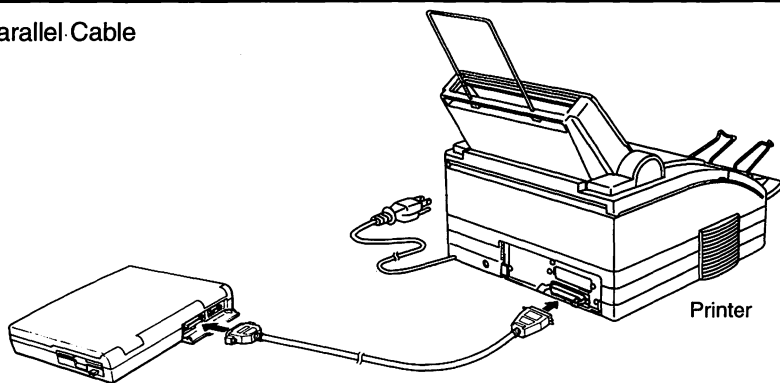
Connecting other Equipment

Printer

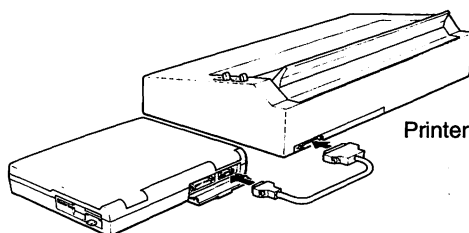
Before you try to connect a printer, you must know which kind of input connector the printer is equipped with: parallel or serial (RS-232C). You will find this information in the printer documentation. Connect the printer cable accordingly to the connector on your machine.

- *Before connecting the printer to your machine, make sure that the power switch on your machine and on the printer is turned to OFF.*
- *After connecting the printer to your machine, turn on your machine first, and then turn on the printer.*

Parallel Cable



Serial Cable



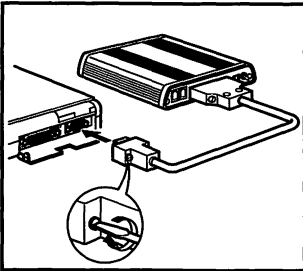
This machine is compatible with most printers currently available on the market. In order to work correctly, however, the machine must be told which kind of printer is connected (refer to "Printer Set Up" on page 312).

Modem

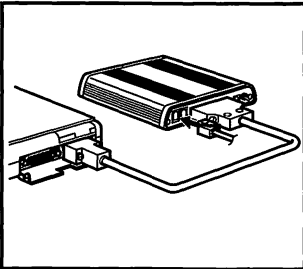
Not all external modems available on the market are compatible with your machine. When you purchase a modem and a modem cable (serial), make sure to consult your dealer. The recommended model is optional modem (2400 BPS DATA MODEM). You may also use a HAYES AT compatible modem.

Refer to the modem documentation for setting the jumper connectors and/or DIP switches, if any. Usually, the manufacturer's settings do not need to be changed. When you purchase a modem, it is a good idea to bring the machine to your supplier's shop and actually try the unit before buying.

- *Before connecting a modem to your machine, make sure that the power is off.*



Connect the serial cable of the modem to the communication connector of your machine. Secure the connector screws.



Connect the telephone cable of the modem adapter to the auxiliary socket of a telephone set or to a telephone line socket.

<<U.S.A. only>>

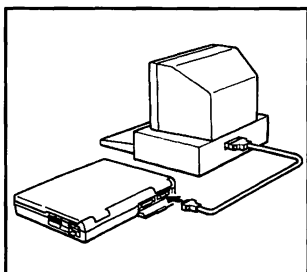
Our optional modem: MO-700 (2400BPS Data Modem)

Connection with another Computer

If you are using a computer at home or at your office, you will find it very useful to be able to transfer data from one machine to the other. Since your Super PowerNote is portable, you can use it, for example, to input data while commuting by train. You will then want to transfer the data to your computer for further editing. If your computer is equipped with a 3.5" disk drive and if its operating system is one of the many DOS versions, it will probably be able to read the diskettes formatted on your Super PowerNote. If you want your Super PowerNote to be able to read diskettes formatted on your computer, consult your DOS manual and format the diskettes to 1.44 megabytes.

If your computer's operating system is not DOS, or if it is equipped with a 5" disk drive only, you will still be able to transfer data though a cable. Your computer must be equipped with an RS-232C serial port and the appropriate communication software. All you need is a NUL MODEM cable, available in most computer shops. For details about data transfer, see "Communication" on page 189.

- *Before connecting a computer to your Super PowerNote, make sure that both machines are switched off.*



Connect the NUL MODEM cable to the communication connectors on both your Brother Super PowerNote and the computer. Secure the connector screws.

Diskettes

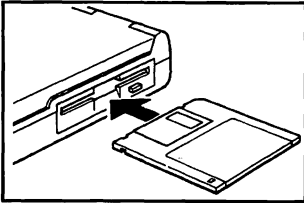
This machine accepts only the following types of 3.5-inch diskettes:

MF-2HD (High Density)

MF-2DD (Double Sided/Double Density/Double Track)

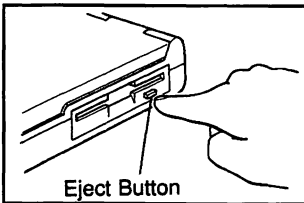
The MF-2DD has half the capacity of the MF-2HD.

Inserting and Removing a Diskette



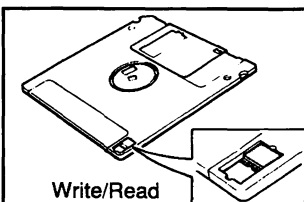
Insert the diskette as shown in the illustration. You will feel some resistance if you try to insert the diskette the other way around.

To remove the diskette, press the eject button.

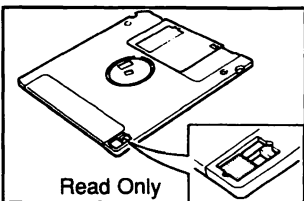


The diskette may be inserted and removed when the power is either on or off. However, you should never insert or remove it while a message indicates that a disk operation is in progress.

Write-Protecting Your Diskettes

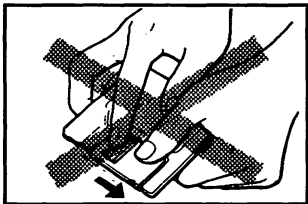


All 3.5-inch diskettes have a switch that protects their contents from accidental erasure. When the switch is in its READ ONLY position, you cannot erase old information or store new information on the diskette.

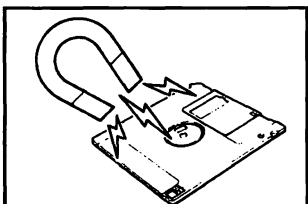


Put the switch in the READ ONLY position to protect a diskette containing valuable information.

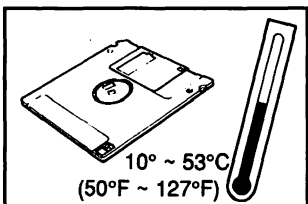
Caring for Your Diskettes



Never open the shutter of the diskette and never touch the surface directly.



Do not use magnetic materials near the diskette.



Never expose the diskette to extremely high or low temperatures.

Initializing New Diskettes

A diskette can be used by a system only after being “formatted” – or initialized by the system for specific use by that system. The initializing program creates a format on the diskette.

This machine uses standard DOS formats of 1.44 megabytes (for 2HD diskettes) or 720 kilobytes (for 2DD diskettes) that are recognized by most personal computers running on DOS. Your machine will therefore be able to share diskettes with personal computers running on DOS.

During formatting, the machine will ask you whether the diskette is 2DD or 2HD, so be sure to check before inserting the diskette.

When a diskette is accessed, the machine checks its format. If the diskette is unformatted or has a different format, the following prompt appears:

Initialize? Press RETURN(yes) or CANCEL(no).

IMPORTANT: *Initializing a diskette erases any data that might be on it. Please be careful if you initialize a diskette that has been previously formatted on a personal computer, in a format that is not recognized by this machine (for example, DOS format 1,200 kilobytes): the files will be completely destroyed. The machine can only read DOS format, 1.44 megabytes or 720 kilobytes.*

If you decide not to format the diskette, press **CANCEL** and insert another diskette. Press **RETURN** if you want to format the diskette and delete all data that it may contain. This message will appear:

Delete all data on the disk? Press Y(yes) or N(no).

If the diskette contains important data that you want to keep, this is your last chance. Press **N** and insert another diskette.

To format, press **Y**. This message will appear:

Select the format type. Press 1 for Double density or 2 for High density.

Press 1 to format a 2DD diskette, or 2 to format a 2HD diskette. If necessary, remove the diskette to check the density (2DD or 2HD), then re-insert the diskette.

Once the diskette has been initialized, it will be in the proper format for use with this Brother unit, and you will also be able to use it with most personal computers.

- *This machine can also recognize and read data from diskettes that have been used with some Brother word processors. For more details, please contact your dealer.*

Backing up a File on a Diskette

The best insurance against losing important data is to make backups (duplicate copies). For details, see "Copying a File on Diskette" on page 274.

General Features

The Auto Power-off Function

The auto power-off function is available when you use this machine without the AC adapter. In order to save battery energy and maximize the life of the display, this machine is equipped with a function that will automatically turn the power off if no key is pressed for more than ten minutes.

However, the auto power-off function is disabled when using the Communication, or Self-Demo mode, even if the machine is powered with the battery.

The Greeting Screen

A greeting screen automatically appears about five seconds after you turn the power on. The greeting message depends on the time the power is turned on. For example, "Good Morning" is displayed if you turn the power on in the morning, and "Good Afternoon" is displayed if you turn the power on in the afternoon.

The Auto Graphic Demo Function

If the MAIN MENU is displayed and no key is pressed for more than five minutes, the Auto Graphic Demo Function will start automatically. Press any key when you want to return to the MAIN MENU.

The Time Clock

This machine is equipped with a clock that is powered with the lithium battery when the power is turned off. Some screens, like the MAIN MENU, display both date and time. Other screens display only the time, but the current date can be seen by pressing **CODE**. The time reappears when **CODE** is released.

The World Clock

In addition to the local time, this machine can display the time for several cities throughout the world.

The Memory

The internal memory of this machine is protected with the lithium battery. As long as the battery is able to supply sufficient power, all the data stored in memory is safe, even if you switch the power off. In order for you to make the best use of the memory, and avoid accidental erasure, it is important that you understand what is stored in the memory.

Two kinds of data are stored in the memory: system parameters, and files that you create.

- The **system parameters** (date and time, printer settings, etc.) are always in memory. When your machine is new, these parameters are set to default values. The system parameters occupy a fixed amount of memory. There is no way to clear that space or to transfer the data it contains to a diskette.

If the lithium battery becomes low or is removed while the power is off, the system parameters will return to their default values.

- **Files that you create** are stored in the memory while you create them. If you switch the power off while working on a Word Processing or Spreadsheet file, the next time you switch the machine on, the file will usually reappear on the screen. After files are created, they can be saved on diskette.

The file you are working on may be lost if the power is cut while an operation that takes time is in progress. Before you turn the power off, make sure that the machine is not busy with such a function.

If the lithium battery becomes low or is removed while the power is off, the files will be erased.

The machine distinguishes three kinds of files:

- **Spreadsheet files:** A Spreadsheet file is stored in the memory only while you are working on it. When the file is completed, you can save it only on diskette.
- **Word Processing files:** You can save several Word Processing files in the memory or on a diskette.
- **All other files:** All the other files that you can create with this machine are automatically stored into the memory. These files include:
 - User Dictionary file** (for the Spell Checker)
 - Abbreviated phrases file** (for speeding up typing)
 - Addressbook file**
 - Scheduler/Calendar file**
 - Things to Do List file**
 - Communication setting file**

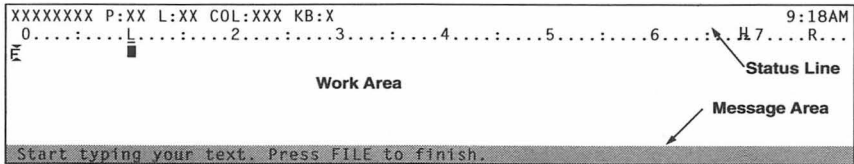
Only one of each of the above kinds of files can be stored in the memory at one time. If you wish, each of these files can be saved separately on diskette and retrieved when necessary. Only one User Dictionary and one Abbreviated Phrase file can be saved on the same diskette.

The Display

The LCD screen of this machine can display 22 lines of 80 characters. Each mode of operation (Word Processing, Communication, etc.) uses a different screen layout, adapted to the work that is done in that mode, but most screens are consistently divided into three principal regions

- **Status Line:** The top line of the screen helps you to remember where you are and which functions are activated. The pieces of information that appear on the status line are called indicators. For example, in the Word Processing mode, the status line indicates the page, line, and column number, the name of the file you are working on, etc. Some indicators appear only when the corresponding function is activated.
- **Work Area:** On most screens, the central part of the display is the place where you can actually input or modify your data.
- **Message Area:** The bottom of the screen is reserved for messages or prompts that the machine displays automatically to tell you what to do next. You will be able to perform most operations by following the instructions at the bottom of the screen.

Example: the main screen of the Word Processing mode.

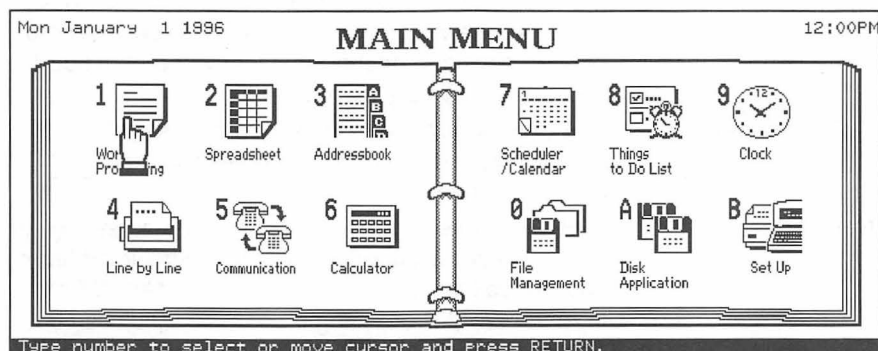


The MAIN MENU Screen

Greeting Screen



Main Menu



When you switch the machine on, the Greeting Screen is displayed for a while, then the list of "modes" available on your machine appear on the screen. The greeting message depends on the time the power is turned on. For example, "Good Afternoon" is displayed if you turn the power on in the afternoon, and "Good Evening" is displayed if you turn the power on in the evening. The list of modes that appears next is called the MAIN MENU and the different modes correspond to the different kinds of work that can be performed. To start working with a mode, press the corresponding number key (1 for Word Processing, etc.), or select with the cursor keys and press **RETURN**. Here is a brief description of the modes:

1 Word Processing

This mode is used to create, edit, and format texts. It is equipped with automatic search, spell checker, cut and paste, and powerful layout functions.

2 Spreadsheet

The Spreadsheet mode is used to create tabulated documents, like financial statements, in which calculations are automatically performed. Such files can be converted in order to include the calculated data into a document.

3 Addressbook

The Addressbook mode provides you with an easy way to input and organize lists of data such as names, addresses, and telephone numbers. This file can be used for easy selection of a telephone in the Communication mode. Data can be merged with document files.

4 Line by Line

In the Line by line mode, the text that you type is sent line by line to the printer. This mode is convenient to print an envelope or short text that you do not need to keep in the memory or on diskette.

5 Communication

The Communication mode allows data transfer between your machine and another computer or communication service.

6 Calculator

When you enter this mode, a part of the screen looks like a pocket calculator and allows for simple arithmetic. You can call this mode from either the MAIN MENU or from the Word Processing mode. The result can be automatically inserted into the document you are working on.

7 Scheduler/Calendar

In this mode you can prepare your schedule and have an alarm automatically remind you of an important appointment, even while you are working with another mode of the machine. It also provides you with an on-screen calendar.

8 Things to Do List

This mode is used to have a list of things to do on screen. It can be used together with the Scheduler/Calendar and is equipped with an alarm function.

9 Clock

The Clock mode allows you to set the date and time. The machine will display the date and time on most screens. You can also set up three different daily alarms. In addition to the local time, this machine can display the time for several main cities in the world.

0 File Management

With this mode, you will be able to perform operations on files, such as moving files from diskette to memory or from memory to diskette, copying, renaming and deleting files. You may also convert Word Processing files into ASCII files and vice versa.

A Disk Application

This mode is reserved for application programs that are available on diskettes. The famous Russian game TETRIS as well as the TURNABOUT game are included with your unit. Other programs may be available in the future.

B Set Up

This mode is used to select the printer, to set a password, to charge the battery quickly, and to start the demonstration program.

Using the Keyboard

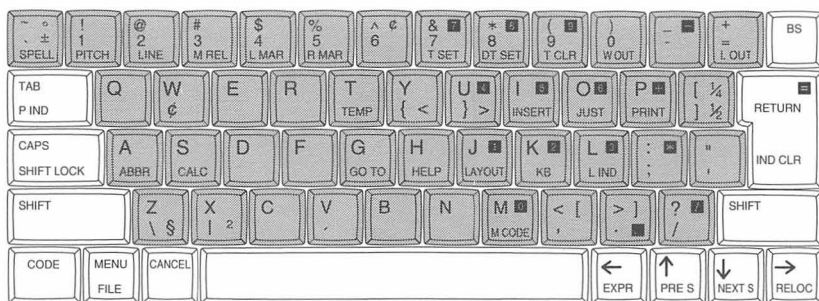
Most keys on this machine can be used either to type characters, or, in combination with the **CODE** key, to activate a function. Such a combination will be denoted with the “+” sign. For example, an instruction such as “Press **CODE** + **A**” means that you have to press **CODE** and keep it down while you press **A**. Most keys are auto-repeat. If you hold down the key, its effect continues to repeat until you release the key.

The Character Keys

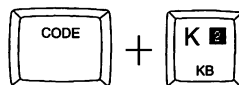
The character keys are used to type text. They are very similar to the character keys of a common typewriter, except that two different ‘keyboards’ are available: standard ASCII keyboard and American keyboard. To switch from one keyboard to the other, press **CODE** + **K** (**KB**). An indicator on the top line of the screen tells you which keyboard is currently selected (KB:I=ASCII, KB:II=American).

In both modes, the character keys can be used in combination with **SHIFT**, to obtain uppercase characters, or with **CODE**, to obtain extra characters. A permanent backspace can also be used to superimpose a character to another in order to obtain a composed character, like ¥, that is not directly available on the keyboard.

When the keyboard is switched to KB:I, “dead keys” can be used to obtain letters with accent marks.



Switching the Keyboard



The display on this multilingual Super PowerNote supports European languages written with the Roman alphabet. While typing your text, you must tell the machine which keyboard you are using in order to have the characters properly displayed on the screen. This is done by pressing **CODE** + **K** (**KB**). These keys toggle between KB:I (ASCII keyboard) and KB:II (American keyboard).

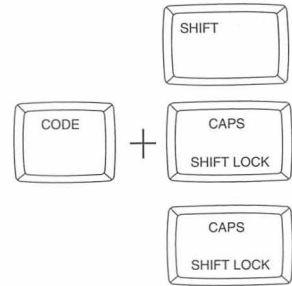
The characters available with KB:II are indicated on the right half of the key tops. When the right half of a key top is empty (letter and number keys, for example), you may assume that you will get the same characters in KB:I and KB:II.

- It is possible to read a text file created with this machine on a Brother Word Processor or vice versa. KB:II on this machine correspond to KB:I (Standard) on the word processors, and the characters are read without any change. KB:I on this machine corresponds to KB:II on the word processors. However some characters will be altered as shown below.*

Super PowerNote	Word Processors	Super PowerNote	Word Processors
]	Ñ	>	ı
~	ß	¢	..
@	ñ	{	¿
#	ç	}	#
[=	\	£
<			¥

- Symbol characters (KB:III) will be displayed in half tone.*

Lowercase and Uppercase Characters



To obtain a capital letter, hold down **SHIFT** and press the corresponding letter key. Letter keys are the same in KB:I and KB:II.

While **SHIFT** is pressed down, the SHIFT indicator appears on the screen. That indicator disappears as soon as you release **SHIFT**.

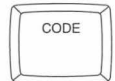
With character keys other than letter keys, you obtain the characters on the upper half of the key tops when the keyboard is shifted.

When you need to type long strings of both capital letters and numbers, like “ACCT. NO. BC104”, press **CAPS**. This shifts the letter keys but leaves the other character keys unshifted. The CAPS indicator will appear on the screen to tell you that the caps function is activated. To release the caps function, press **CAPS** again.

- If you press **SHIFT** while the CAPS indicator is displayed, this indicator is temporarily replaced with the SHIFT indicator.

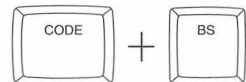
To shift all character keys, press **CODE** + **CAPS** (**SHIFT LOCK**). The SHIFT indicator is displayed permanently, and all the characters you type are upper case. To release the shift lock function, press **SHIFT**.

Extra Characters



The extra characters are those marked in green on your keyboard. To enter such a character, hold **CODE** down and press the character key.

Superimposed Characters (Permanent Backspace)



It is possible to create characters that are not available on the keyboard (“¥”, for example) by superimposing two available characters.

- Type the first character (“Y” in our example).
- Although you may enter the characters in either order, start with the one you want to appear in the text area.

2. Press **CODE** + **BS**. The first character appears now in reversed color, and the cursor moves next to the P BS indicator on the status line.
 3. Type the second character ("=" in our example) on the status line. As soon as the second character is typed, the cursor moves back to the text area and you may resume normal typing.
- *When you subsequently move the cursor to the first character (press **←** at this point, for example), the second character re-appears next to the P BS indicator.*
 - *To delete superimposed characters, delete the first character (use **BS**).*

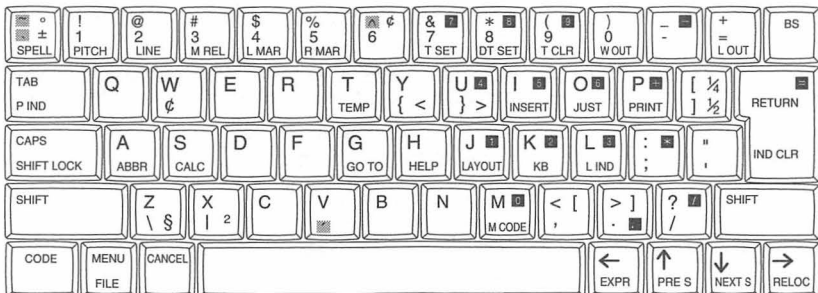
Accents ("Dead" Keys)

This Super PowerNote's multilingual keyboard supports the accented vowels of such languages as French, German, and Spanish. This feature is available with KB:I only.

If you have ever used a typewriter, you already know the basic procedure: Type the accent and then the base character. Unlike regular keys, the accent keys are "dead", that is, the cursor does not move afterward so the base character appears under the accent. Make sure that the keyboard is set to KB:I, and try the following example.

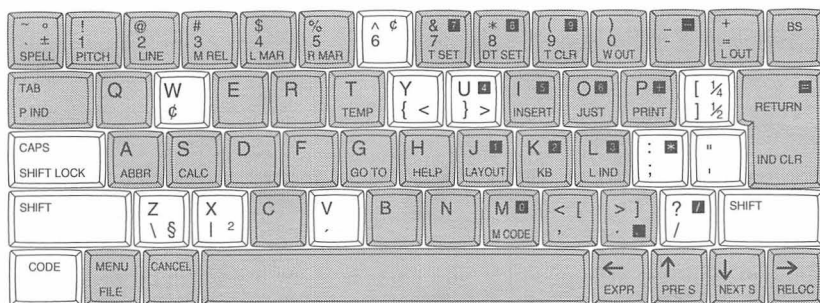
1. Type the accent "^". The accent appears next to the indicator DEAD on the top line of the screen. The cursor is reversed and waits for a base character to be input. You are allowed to input a maximum of two dead characters. If you make a mistake, press **CANCEL** to delete the dead character(s) and retype.
 2. Type the letter "o". The letter with its accent "ô" now appears in the text area.
- *With some combinations of accents and base characters (such as Y and ^), the base character appears alone and in reverse color in the text area. When you subsequently move the cursor to the base character, the accent re-appears next to the DEAD indicator.*
 - *To delete an accented character, proceed as you would for a normal character (use **BS**).*

In the next illustration, dead characters are indicated with a small grey box.



The Function Keys

The function keys are used to activate the many functions of the machine. Many functions can be activated with **CODE** + a character key.



Some Important Function Keys

An important advantage of your machine is that all the software it contains has been designed to ensure optimal consistency in the use of the keyboard across the different modes. After learning to use one mode, you will be able to learn each one very quickly.

←, →, ↑, and ↓

These are the cursor keys, used to move the cursor to any desired place on the screen.

RETURN and **CANCEL**

While an operation is in progress, you will often be requested to confirm or quit. **RETURN** allows you to go on and **CANCEL** allows you to go back to the previous step or escape completely. Pressing **CANCEL** repeatedly when you are lost will eventually return you to a known situation.

MENU

Pressing **MENU** displays a function menu on the top of the display. A function can then be selected using the cursor keys, and activated by pressing **RETURN**. Most of the functions that are selectable from a menu can also be activated with "short-cut" keys.


CODE + **H** (**HELP**)

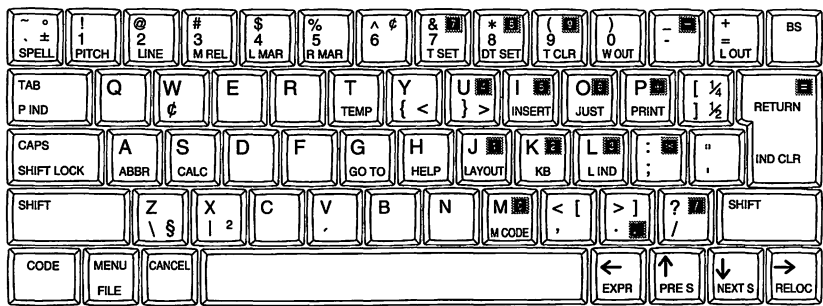
Pressing **CODE** + **H** (**HELP**) displays help information about the mode you are working with. For more details, see "On-Screen Help Information" on page 26.

CODE + **MENU** (**FILE**)

Pressing **CODE** + **MENU** (**FILE**) allows you to finish your work and save the data.

The Numeric Keypad

The numeric keypad is available only in the Calculator and Spreadsheet modes. In those modes, the numeric keypad is switched on or off by pressing **CODE** + . When the keypad function is on, the NUM indicator is displayed at the upper-right corner of the screen, and you can use the keys shown in the illustration below to enter numbers.



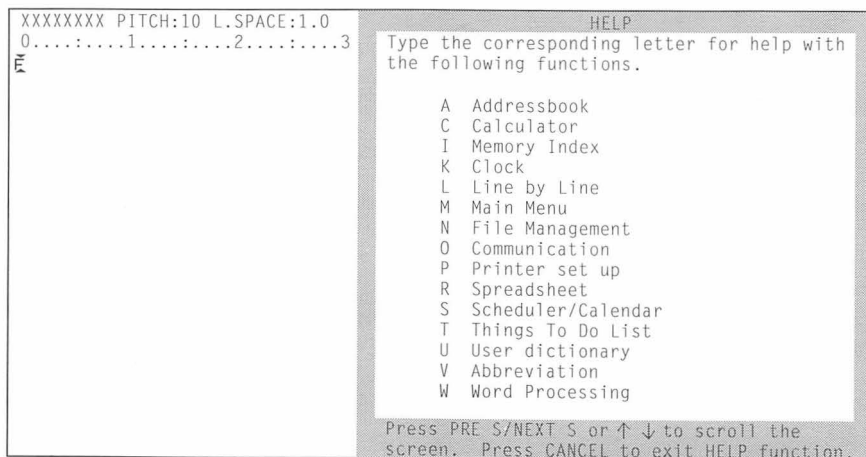
For more details about the numeric keypad, see “Numeric Keypad” on page 100 and “Numeric Keypad” on page 217.

On-Screen Help Information

Each time you need help regarding the functions available in the mode you are working on, or about the keys used to activate a function, feel free to press **CODE** + **H** (**HELP**). A help menu will appear together with instructions to find the information you are looking for. Follow these instructions, and after locating the desired information, press **CANCEL** to return to your work.

- *Since the details of each operation are not provided, the help information is not a replacement for careful reading of this Guide.*

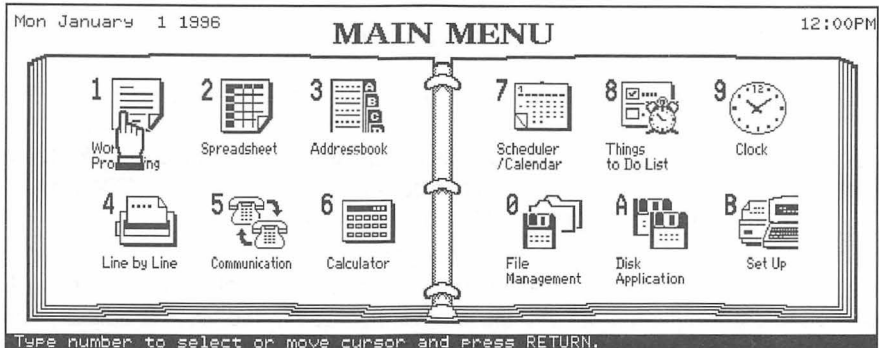
Example of Help Menu



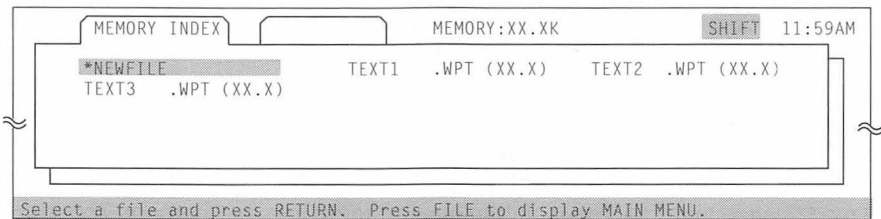
Word Processing

How to Start?

1. To start working in the Word Processing mode, switch the machine on to display the MAIN MENU.

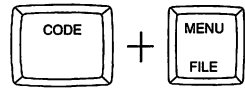


2. Type "1" or move the cursor to 1. Word Processing, and press **RETURN**. The MEMORY INDEX appears.



3. To start creating a new file from scratch, use the cursor keys to select *NEWFILE and press **RETURN**.
To retrieve an existing file, use the cursor keys to select the file and press **RETURN**.
4. The INPUT/EDIT screen described on page 29 appears.
 - When you select *NEWFILE, the file name displayed on the upper-left corner of the INPUT/EDIT screen is *NEWFILE, and you can start creating a new document.
 - When you select an existing file, its file name is displayed on the upper-left corner of the INPUT/EDIT screen and you can start editing the document.
 - A file can be up to 32K in size.

How to Finish?



When your work is finished, press **CODE** + **MENU** (**FILE**) to save your work. For details, see “Saving Your Work” on page 86.

If you are working on a *NEWFILE, and turn your unit off without saving it, the next time you switch the machine on, the INPUT/EDIT screen will re-appear in the same condition that you left it.

About the Word Processing Files

You can have several Word Processing files in the memory at the same time. You can also transfer the files to a diskette. You can only directly retrieve or print files that are stored in the memory. For details about file transfer between diskette and memory, see “Transferring Files from Memory to Diskette” on page 272, and “Transferring Files from Diskette to Memory” on page 278.

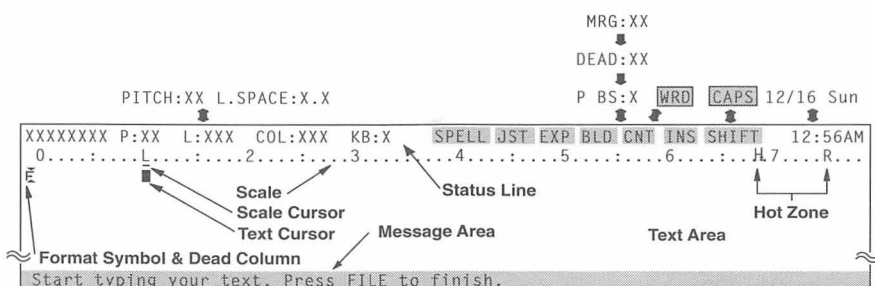
When you exit the Word Processing mode, the machine asks you whether you want to save or abandon the file. If you decide to save the file, the machine will ask you to enter a file name if the file is new, or will save the file immediately if the file you are working on has been named previously. For details about saving and retrieving files, see “Saving Your Work” on page 86, and “Retrieving Previous Work” on page 88.

The name of the file you are working on is displayed on the upper-left corner of the INPUT/EDIT screen. A new file is automatically assigned the file name *NEWFILE. If you are working on a file retrieved from the memory, the file name under which you saved the file in the memory will be displayed instead of *NEWFILE.

While working, in the Word Processing mode, you can also edit two separate files: User Dictionary, and Abbreviated Phrase. For details, see “User Dictionary Maintenance” on page 64, and “Abbreviated Phrase Maintenance” on page 71. Any modification to those files is automatically stored into the memory. The memory can contain only one User Dictionary, and one Abbreviated Phrase file. You can save those files to a diskette, but only one of each type per diskette. The file will be saved under the file name SPELLUSR.DCT (User Dictionary) or ABBR.PHR (Abbreviated Phrase). You are not allowed to change these file names. Loading one of these files from diskette to memory will overwrite the current one in the memory. Saving one of these files to a diskette that already contains one will overwrite the old version on the diskette.

INPUT/EDIT Screen

The INPUT/EDIT screen shown below appears after you select *NEWFILE or an existing file name on the MEMORY INDEX screen. All text input and editing is done on that screen.



Scale

The scale assists you in determining your position on a page. The numbers indicate the position from the left edge of the paper. The scale cursor (underline) indicates the current column. Other symbols remind you of some format settings (see table below).

- The scale can be disabled in order to get one additional line of text on the screen. For details, see "Disabling the Scale" on page 79.

Symbols displayed on the scale

Symbol	Meaning
L	Position of the left margin
R	Position of the right margin
T	Position of a tab
D	Position of a decimal tab
H	Beginning of the hot zone
0, 1, 2,...	Absolute position from the left edge of the paper

Message Area

This line is reserved for guide messages (prompts) that ask you a question, give direction or display error messages. When no prompt and no error message are displayed, this line is used for your text.

- For a list of error messages, see "Error Messages" on page 319.

Status Line

The status line shows you the current settings. Some indicators are followed with a value and are always displayed. They indicate the cursor's page, line and column position. Pressing **CODE** will display the selected pitch and line spacing. The indicators on the right appear (in reversed color) only when the corresponding function has been activated. For a complete list of indicators, refer to the table below.

Indicators of the INPUT/EDIT screen

Indicator	Meaning
XXXXXXXX	Name of the current file
P:XX	Number of the current page
L:XX	Number of the current line
COL:XX	Number of the current column
PITCH:XX	Current pitch (10, 12, or 15); appears when CODE is pressed
L.SPACE:X.X	Current line spacing (1.0, 1.5, or 2.0); appears when CODE is pressed
KB:X	Current keyboard selection (I or II)
SHIFT	On if the keyboard is in uppercase mode
CAPS	On if the keyboard is in caps lock mode
INS	On when the insert mode is activated
EXP	On when the expand function is activated
P BS:X	Displays the superimposed character when the cursor is on the base character
DEAD:XX	Displays the dead character when the cursor is on the base character
MRG:XX	Displays the label number of the data to be automatically inserted while printing with the merge function.
BLD	On when the bold function is activated
CNT	On when the continuous underline function is activated
WRD	On when the word underline function is activated
JST	On when the justify function is activated
SPELL	On when the Spell Checker is activated

Text Area

This is where the text that you type will appear. The only part you cannot use is the dead column (to the left of column 0), which is reserved for the “format change” symbol “ E ”. The text cursor (solid box) indicates where you are. Other symbols appear in the text to remind you of the format functions that you used, but will not be printed (see table below).

- The text area can be split in order to display two documents simultaneously. (For details, see “Displaying two Documents” on page 80.)

Symbols displayed in the text area

Symbol	Meaning
H	CENTERING BETWEEN MARGINS: displayed at the left of the centered string when the centering function is activated
H	CENTERING BETWEEN TABS: displayed at the left of the centered string when the centering function is activated
E	FORMAT CHANGE: displayed in the dead column, in front of the first line of a reformatted paragraph
L	INDENT CLEAR: displayed at the end of an indented paragraph when <code>CODE</code> + <code>RETURN</code> (<code>IND CLR</code>) is pressed
L	LINE FEED: displayed at the end of a paragraph when <code>RETURN</code> is pressed
M	MERGE CODE: displayed at the cursor position when <code>CODE</code> + <code>M</code> (<code>M CODE</code>) is pressed
P	PAGE BREAK: displayed at the end of a paragraph to indicate that the next part of the document starts on a new page
P	PARAGRAPH INDENT: displayed at the left of a tab when the cursor has been moved with <code>CODE</code> + <code>TAB</code> (<code>P IND</code>)
S	PERMANENT SPACE: displayed at the cursor position when <code>CODE</code> + <code>(SPACE BAR)</code> is pressed
R	RIGHT MARGIN FLUSH: displayed at the left of the aligned string when the right margin flush function has been activated
T	TAB: displayed at the left of a tab when the cursor has been moved with <code>TAB</code>

Typing on the Display

Type your text just as you would on a typewriter. The text appears on the screen instead of being printed on paper.

If you make a mistake, use **BS** to delete. For more details about corrections, see “Revising Text – Basic Functions” on page 33.

Hot Zone

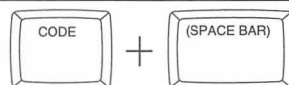
The last six columns before the right margin are defined as the “hot zone”. The “½” symbol on the scale corresponds to the hot zone point. Your machine knows how to break text so that it automatically “wraps” words to the next line once typing reaches the hot zone area.

Word Wrap

The “word wrap” function allows you to type a paragraph continuously without being concerned about carrier returns. In the hot zone, when a word is going to extend beyond the right margin, the word and the cursor will be moved to the next line automatically. The only time you need only to press **RETURN** is to end a line in order to start a new paragraph.

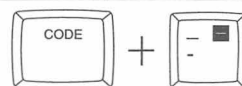
The word wrap function is always active when using the screen. This feature permits continuous typing and helps build typing speed. The text cursor automatically moves to the next line whenever a space or hyphen is typed in the hot zone.

Permanent Space



Permanent spaces entered by pressing **CODE** + **(SPACE BAR)** are special spaces that link words together, protecting them from being separated on different lines. A permanent space is displayed with the symbol “␣” and is considered part of the two words it links. Such a space is never adjusted by the automatic justification function – and does not cause the cursor to jump to the next line when entered in the hot zone.






Permanent Hyphen



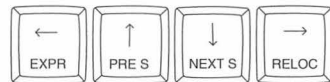
A permanent hyphen, entered with **CODE** + **-**, is for words that always require a hyphen (mother-in-law, for example). In the hot zone, a permanent hyphen does not send the cursor to the next line. Outside the hot zone, all hyphens are permanent, so it is not necessary to use **CODE**.

Revising Text – Basic Functions




















Moving the Text Cursor

To make a revision, you must first go to that part of the document. The text cursor indicates your current position in the document. The cursor is moved across your document using the cursor keys (, , , ) alone or in combination with . You may also use the goto page function to jump to a specified page.

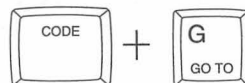
Cursor Keys



Moving the cursor

Keys	Function
	Moves the cursor one character to the left, up to the left margin.
	Moves the cursor one character to the right, up to the right margin.
	Moves the cursor one line up, to the first line of the document. The text is scrolled if the cursor is on the first line of the screen.
	Moves the cursor one line down, to the end of the document. The text is scrolled if the cursor is on the last editable line of the screen (the second line from the bottom when no message is displayed).
 +  ()	Moves the cursor to the left margin.
 +  ()	Moves the cursor to the end of the current line but does not jump past a symbol that signals the end of a paragraph ("  ", "  ", and "  ").
 +  ()	Moves the cursor one full screen up (minus an overlap of one line), to the beginning of the document.
 +  ()	Moves the cursor one full screen down (minus an overlap of one line), to the end of the document.

GOTO Page



1. Press **CODE** + **G** (**GO TO**). The machine asks you to type in the number of the page you wish to move the cursor to.

Type number and press RETURN. Press ←, → to go to top or end of text.

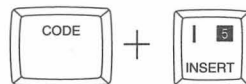
PAGE:

2. Type the desired page number, then press **RETURN** to move the cursor to that page.
 - If you entered an incorrect page number, you may change it by pressing **BS**, or stop the operation by pressing **CANCEL**.
 - If you enter a page number that is higher than the number of the last page, the cursor will jump to the last page.
 - Instead of typing a page number, press one of the cursor keys just after pressing **CODE** + **G** (**GO TO**):

Goto page

Keys	Function
CODE + GO TO + ←	Moves the cursor to the beginning of the document.
CODE + GO TO + →	Moves the cursor to the end of the document.
CODE + GO TO + ↑	Moves the cursor to the beginning of the current page; moves to the beginning of the previous page when the cursor is at the beginning of the current page.
CODE + GO TO + ↓	Moves the cursor to the beginning of the next page.

Inserting Text



Pressing **CODE** + **I** (**INSERT**) switches between insert and overwrite modes, and turns the INS indicator on and off accordingly.

In overwrite mode (indicator INS off), each character you type replaces the current character. You type over the existing data and your new data replaces the old data.

In insert mode (indicator INS on), the characters you type appear in front of the cursor, the rest of the line automatically moves to the right and, if necessary, the last word moves to the next line.

- *Since deleting unnecessary characters is usually easier than retyping characters that have been deleted, it's a good idea to be in the insert mode before you start revising.*

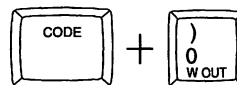
Deleting a Character






Press  to delete one character to the left of the cursor.

- *This key also deletes paragraph end symbols “↵”, “¶”, and “␣” except when these symbols are located just before a format symbol “⌘” or a centering symbol “¶”.*

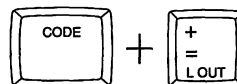
Deleting a Word









To delete a word, position the cursor on the space immediately following the word and press  +  (). This removes any portion of a word to the left of the cursor, up to the previous blank space.

- *You will want to use this feature when you mistype a word in such a way that deleting it and typing it over is faster than otherwise correcting it.*

Deleting a Line



To delete a line, position the cursor anywhere after the last character of the line and press  +  (). Pressing  +  () removes any portion of a line to the left of the cursor, up to the beginning of the line.

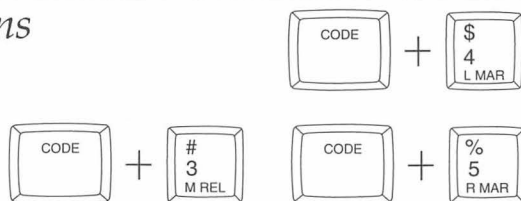
Formatting Text – Basic Functions

Format Change Symbol

The dead column of the text area (column 0) is reserved for the format change symbol “ E ”. Each time you change the format, – that is, the left or right margin, tabs, justification, etc. – this symbol appears in the dead column at the beginning of the paragraph, and the text automatically adjusts to fit the new setting. These new settings affect not only the current paragraph, but also all subsequent text up to the next format change symbol. The text above the symbol remains unchanged. To return to a previous format setting, you may delete the format symbol in the dead column. To delete the format symbol:

1. Move to the first character of the line where the format takes effect.
2. Press **MENU** to recall the function menu.
3. Move the cursor to BLOCK and press **RETURN**.
4. Select DELETE and press **RETURN**.
5. Press **←** to highlight the format change symbol E and press **RETURN**.
6. Press **RETURN** again to confirm the deletion. The text will conform to the previous format.

Left and Right Margins

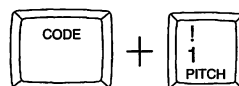


The left and right margins are set to columns 10 and 75 respectively for a *NEWFILE. Margins can be relocated at any time, before, during, or after typing the text.

1. Move the cursor to the new position for the left or right margin while observing the scale. (See “Moving the Text Cursor” on page 33.) If the new position is beyond the current margins, press **CODE** + **3** (**M REL**) when the cursor is on the margin to allow the cursor to move freely.
 2. Press **CODE** + **4** (**L MAR**) to set the new left margin, or **CODE** + **5** (**R MAR**) to set the new right margin. The L or R symbol on the scale will move accordingly.
- If you press **CODE** + **3** (**M REL**) when there is no need to modify the margins, press **CANCEL** to resume normal editing.

The minimum distance between margins is set to two inches. The maximum distance is nine inches. Remember, however, that the length of a printed line must be smaller than the paper width, and that this length also depends on the selected pitch.

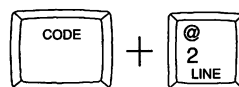
Setting the Pitch



The pitch can be set to 10 (Pica, 10 characters per inch), 12 (Elite, 12 characters per inch), or 15 (Micron, 15 characters per inch).

1. Move the cursor to the position where you want to change the pitch.
2. Press **CODE** + **1** (**PITCH**) to change the pitch through the cycle 10, 12, 15. As soon as you press **CODE**, the PITCH indicator appears. A format symbol "ξ" appears in the dead column.

Changing the Line Spacing



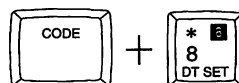
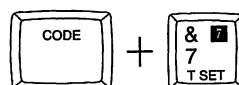
The line spacing can be set to 1.0 (6 lines per inch), 1.5 (4 lines per inch), or 2.0 (3 lines per inch).

1. Move the cursor to the position where you want to change the line spacing.
2. Press **CODE** + **2** (**LINE**) to change the line spacing through the cycle 1.0, 1.5, 2.0. As soon as you press **CODE**, the L.SPACE indicator appears. A format symbol "ξ" appears in the dead column.

Tabs and Decimal Tabs

If you have been using a typewriter, you already know how convenient tabs are for aligning text. Decimal tabs provide additional convenience when typing numbers. Decimal tabs automatically align a column of numbers at the decimal point instead of the first character. The scale indicates these two types of tabs with T for normal tabs, and D for decimal tabs.

Setting Tabs

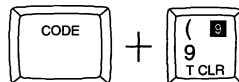


You may change tabs at any time – before, while, or after typing the text.

1. Move the cursor to the position where you want a tab. (See "Moving the Text Cursor" on page 33.)

2. Press **CODE** + **7** (**TSET**) to set a normal tab, or **CODE** + **8** (**DTSET**) to set a decimal tab at the current cursor position. The corresponding symbol T or D appears on the scale. Up to 30 tab and decimal tabs can be set. Setting a tab where you already had a decimal tab replaces the D with a T and vice-versa.
- *When you start with a *NEWFILE, there are no tabs set.*
- *Since the pitch determines the actual position on the printed page, the columns may appear at undesired positions if you change the pitch of a table formatted with tabs and decimal tabs.*

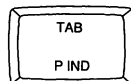
Clearing Tabs



1. To clear a single tab or decimal tab, move the cursor to that position and press **CODE** + **9** (**TCLR**).
2. To clear all tabs and decimal tabs, hold down **CODE** + **9** (**TCLR**) until the following message appears:

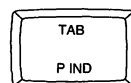
All tabs cleared.

Using Tabs while Typing



1. Press **TAB** to move the cursor to the next tab to the right. A symbol "→" appears on the screen just before the new text cursor position to remind you that there is now a tab in the text.
- *If there is no tab to the right, the cursor moves to the right margin.*
2. Type your text.
3. Repeat the above procedure for each column in your table.

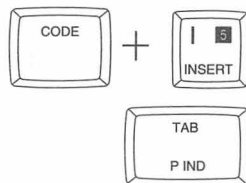
Using Decimal Tabs while Typing



Decimal tabs are a very convenient feature. When you move the cursor there with **TAB**, the cursor remains fixed in that column, and each character that you type appears to the left of the tab. Once you type the decimal point, however, the point appears at the tab, and the cursor returns to normal operation. The primary use, of course, is to align columns of numbers with decimal points.

1. Press **TAB** to move the cursor to the next decimal tab to the right. A symbol “→” appears on the screen just before the new text cursor position to remind you that there is now a tab in the text.
 - *If there is no tab to the right, the cursor moves to the right margin.*
2. Type the number.
3. Repeat the above procedure for each column in your table.
- *The cursor also returns to normal operation if you press **RETURN** or **TAB**.*

Inserting Tabs



As always, you may type your number or text first and align the columns with tabs and decimal tabs later.

1. If the INS indicator is off, press **CODE** + **I** (**INSERT**) to switch to the insert mode.
 - *If the insert mode is not on, **TAB** will just move to the next tab without aligning the text.*
2. Position the cursor on the beginning of the word that you want to align.
3. Press **TAB**. The text adjusts to fit the margins and page length.

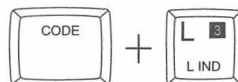
Removing Tabs



If you change your mind, you may also remove a tab or decimal tab in order to undo a table.

1. Position the cursor just after the tab symbol “→” on the screen.
2. Press **BS**. The text adjusts to fit the margins and page length.

Line Indent



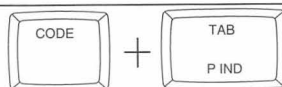
Pressing **CODE** + **L** (**L IND**) is the same as typing five spaces. The primary application is indenting the first line of a paragraph.

- *If the insert mode is not on, these five spaces overwrite the five characters at the cursor location.*

Paragraph Indent

The paragraph indent function may be considered as a temporary left margin.

Setting the Temporary Left Margin



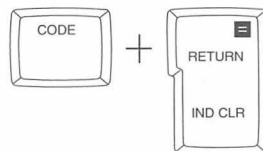
There may be a time that you will need to indent text from the left margin. The paragraph indent feature indents text to a tab. When the indent is released, the cursor returns to the original left margin.

1. Set the tabs you will need for any of the indented paragraphs. (See “Setting Tabs” on page 37.)
- *If your document has multiple levels of paragraph indentation, it is a good idea to set all the tabs together at one point near the beginning.*
2. If you have text, such as a section number, that you wish outside the indented block, type that data.
3. Press **CODE** + **TAB** (**P IND**) as many times as necessary to move the cursor to the tab setting you want to be the new temporary margin. A “**↵**” symbol is displayed just before the new cursor position to remind you that the following text is indented.
- *If you change your mind, use **BS** to remove the paragraph indent symbol “**↵**”.*

Using a Temporary Left Margin

Type the text of the paragraph. If you press **RETURN** or type a space or hyphen in the hot zone, the cursor returns to the paragraph indent position on the next line, and not to the left margin.

Returning to the True Left Margin



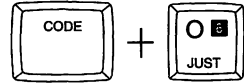
At the end of the indented paragraph, press **CODE** + **RETURN** (**IND CLR**) to return to the original left margin. The end of the indented paragraph is marked with a “**↵**” symbol to indicate that the paragraph indent mode has been exited.

- *You are able to indent a paragraph after it has been typed. Position the cursor on the first character of the paragraph to be indented and press **CODE** + **TAB** (**P IND**) to reposition it at the tab position. At the end of the indented block, press **CODE** + **RETURN** (**IND CLR**) to return to the original left margin.*

Automatic Justification

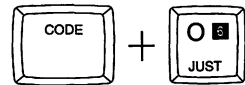
The justify function adjusts the spacing between words so that every complete line of text is aligned with both left and right margins.

Entering Justified Text



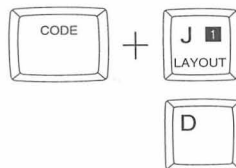
1. Press **CODE** + **O** (**JUST**) to turn the JST indicator on and start typing.
2. When you type a space or a hyphen in the hot zone, the cursor moves to the next line and the current line is justified.
3. To resume normal typing, press **CODE** + **O** (**JUST**) again to turn the JST indicator off.

Justifying Existing Text



1. Position the cursor at the first paragraph that you want to justify.
2. Press **CODE** + **O** (**JUST**) to turn the JST indicator on. A “**E**” symbol appears in the dead column of the first line of the paragraph and the text is automatically justified from this line down to the next “**E**” symbol (if any exists) or down to the end of the document. If your document contains many “**E**” symbols you will need to repeat these steps in order to justify the whole text.

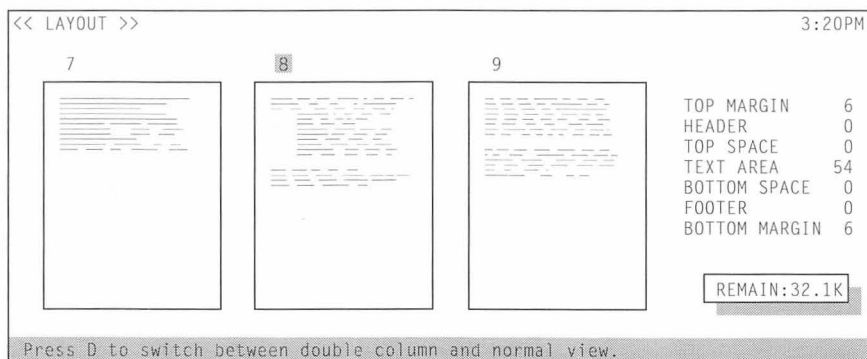
Page Layout View Function



The page layout view function displays three pages at a time on the screen. To do this, the text is scaled down so that a character is reduced to a dot on the screen. You will, of course, not be able to read the text displayed that way, but you will have a general view of the layout.

1. Position the cursor on the page that you want to preview.
2. Press **CODE** + **J** (**LAYOUT**).

Three pages of your document are displayed simultaneously on the screen in reduced scale. The number of each page appears in normal scale at the upper-left corner of each page (the number of the page that was displayed on the INPUT/EDIT screen appears in reverse color). For example, if page 8 was displayed on the INPUT/EDIT screen, pages 7 to 9 will now be displayed, and the cursor will be on page 8.

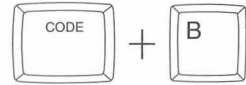


3. Use the cursor keys **←**, **→**, **↑**, and **↓** to move the cursor. The cursor keys will scroll the screen window by steps of three pages when you try to move the cursor past the current window.
4. To return to the INPUT/EDIT screen, press **RETURN**, **CANCEL**, or **CODE** + **J** (**LAYOUT**). The page which was selected in the preview screen appears now in the normal display. This feature is very convenient when you spot some layout defect in the preview screen. You may select that page number and immediately switch to the normal display to correct the defective format.
- *The text is first displayed according to the setting of the DOUBLE COLUMNS PRINTING option on the PRINT MENU screen (see "Printing a File in Memory" on page 88). A single column is displayed if the option is set to NO, or two columns per page if the option is set to YES. Press **D** to switch from one display mode to the other.*

Adding Effects (STYLE)

The effects provided by the STYLE option on the function menu allow you to enhance the appearance of your document. They include bold characters, underlining, automatic insertion of blanks (expand), as well as subscripts and superscripts.

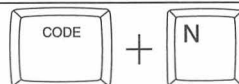
Bold Face Characters



STYLE	BLOCK	CTR/RMF	SPELL	ABBR/THR	SEARCH	FORM	PAGE
BOLD		OFF	(ON)				
UNDERLINE		OFF	(CNT) (WRD)				
EXPAND		OFF	(ON)				
SUPER SUB ON/OFF		OFF	(SUPER) (SUB)				

1. If you want to turn the bold function on before typing, skip this step. If you want to change the type face of a portion of text already typed, position the cursor at the beginning of that portion.
2. Press **MENU** to display the menu.
3. Use **←** and **→** to select STYLE, and press **RETURN** or **↓**.
4. Use **↑** and **↓** to select BOLD.
5. Use **(SPACE BAR)** to turn the bold function ON.
6. Press **RETURN**. The BLD indicator is now on.
- **Short cut:** Instead of (2), (3), (4), (5) and (6), press **CODE** + **B** to switch the bold function ON/OFF.
7. The text you now type or the text you scan by moving the cursor right/down is displayed in bold. If you move the cursor past the desired position, move back to unmark. To move the cursor one line at a time, use **↓** and **↑**.
8. To return to normal typing, repeat steps (2), (3), (4), (5) and (6) to turn the bold function OFF, or press **CODE** + **B**.
- To undo bold characters, position the cursor just after the last bold character, turn the bold function ON, and move the cursor left/up. Turn the bold function OFF to stop undoing bold.

Underlining



STYLE	BLOCK	CTR/RMF	SPELL	ABBR/THR	SEARCH	FORM	PAGE
BOLD		OFF	(ON)				
UNDERLINE		OFF	(CNT) (WRD)				
EXPAND		OFF	(ON)				
SUPER SUB ON/OFF		OFF	(SUPER) (SUB)				

1. If you want to turn the underline function on before typing, skip this step. If you want to underline a portion of text already typed, position the cursor at the beginning of that portion.
2. Press **MENU** to display the menu.
3. Use **←** and **→** to select STYLE, and press **RETURN** or **↓**.
4. Use **↑** and **↓** to select UNDERLINE.
5. Use **(SPACE BAR)** to select CNT (continuous underlining) or WRD (word underlining).
6. Press **RETURN**. The corresponding indicator is now on.
 - **Short cut:** Instead of (2), (3), (4), (5) and (6), press **CODE** + **N** to switch the underline function CNT/WRD/OFF.
 - If you select continuous underlining, all will be underlined, including blank spaces. With word underlining, blank spaces are not underlined.
7. The text you now type or the text you scan by moving the cursor right/down is underlined. If you move the cursor past the desired position, move back to remove the underline. To move the cursor one line at a time, use **↓** and **↑**.
8. To return to normal typing, repeat steps (2), (3), (4), (5) and (6) to turn the underline function OFF, or press **CODE** + **N**.
 - To undo underlining, position the cursor just after the last underlined character, select CNT or WRD, and move the cursor left/up. Turn the underline function OFF to stop removing underlining.

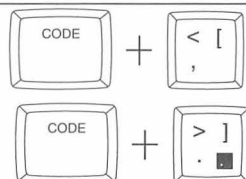
Typing Expanded Text

STYLE	BLOCK	CTR/RMF	SPELL	ABBR/THR	SEARCH	FORM	PAGE
BOLD		OFF	(ON)				
UNDERLINE		OFF	(CNT) (WRD)				
EXPAND		OFF	(ON)				
SUPER SUB ON/OFF		OFF	(SUPER) (SUB)				

The expand function is used only while typing. You cannot use it to reformat text that has been typed.

1. Press **MENU** to display the menu.
 2. Use **←** and **→** to select STYLE, and press **RETURN** or **↓**.
 3. Use **↑** and **↓** to select EXPAND.
 4. Use **(SPACE BAR)** to turn the function ON.
 5. Press **RETURN**. The EXP indicator is now on.
 6. The text you now type is expanded, that is, a permanent space is automatically inserted after each text character.
 7. To return to normal typing, repeat steps (1), (2), (3), (4) and (5) to turn the expand function OFF.
- *The permanent spaces inserted with the expand function cannot be removed automatically. To undo the expand format, delete the permanent spaces one by one using **BS**.*

Subscripts and Superscripts



STYLE	BLOCK	CTR/RMF	SPELL	ABBR/THR	SEARCH	FORM	PAGE
BOLD		OFF	(ON)				
UNDERLINE		OFF	(CNT) (WRD)				
EXPAND		OFF	(ON)				
SUPER SUB ON/OFF		OFF	(SUPER) (SUB)				

You are able to enter and print subscripts and superscripts.

- *Characters in subscript and superscript are displayed on the same line as normal characters. When you input a subscript or superscript or move the cursor to a subscript or superscript, however, only a half of the cursor appears (lower-half for subscripts, and upper-half for superscripts).*
1. Move the cursor to the position where you want to type a superscript (or subscript).
 2. Press **MENU** to display the menu.
 3. Use **←** and **→** to select STYLE, and press **RETURN** or **↓**.
 4. Use **↑** and **↓** to select SUPER SUB ON/OFF.
 5. Use **(SPACE BAR)** to select SUPER or SUB.
 6. Press **RETURN**. If the superscript mode is activated, only the upper half of the cursor will be displayed. The lower half will be displayed if the subscript mode is activated. The text you now type is superscript or subscript.
 7. To return to normal typing, repeat steps (2), (3), (4) and (5) to switch the function OFF.
- *To undo superscripts or subscripts, turn the function OFF and retype the characters.*
 - **Short cut:** Instead of the above procedure, use **CODE** + **·** and **CODE** + **·**.

Example: Try to enter "e=mc²".

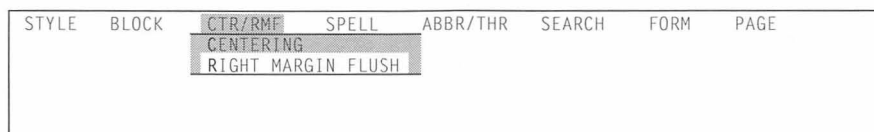
1. Type "e=mc".
 2. Press **CODE** + **3**.
 3. Type "2".
 4. Press **CODE** + **2**.
- *To enter subscripts, proceed in the same way as above, but reverse the **CODE** + **3** and **CODE** + **2** keys.*
 - *Each pair of keys (**CODE** + **3** and **CODE** + **2**) cancels the other, and the two pairs must always be used in combination. If you try to press one of the pairs more than once, the machine beeps.*

Centering and Right Margin Flush (CTR/RMF)

The centering function is used to center a line as characters are typed or to center a line that was previously typed. You may center text either between margins or tabs.

The right margin flush mode is used to have a line automatically adjusted to end exactly on the right margin. Many people like to date their letters this way.

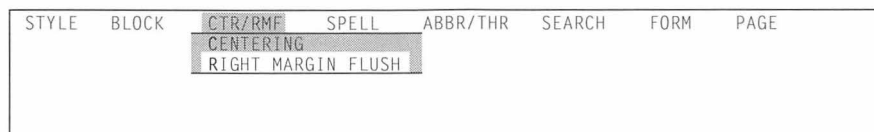
Centering Between Margins



When you center between margins, the position of the cursor in the line does not matter.

1. Press **MENU** to display the menu.
2. Use **←** and **→** to select CTR/RMF, and press **RETURN** or **↓**.
3. Use **↑** and **↓** to select CENTERING and press **RETURN**. The cursor moves to the center point between your margins. The symbol of centering between margins “≡” appears on the line. If the text has already been typed, it is automatically centered and you may skip step (4).
- **Short cut:** Instead of (1), (2) and (3), press **CODE** + **F**.
4. Type the text.
5. Press **RETURN** to finish the centering operation.

Centering Between Tabs



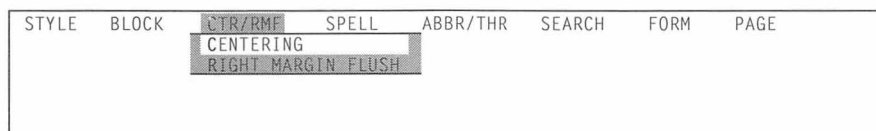
1. Press **TAB** as many times as necessary to reach the desired tab position (the position that will become the left end of the centering range).
2. Press **MENU** to display the menu.
3. Use **←** and **→** to select CTR/RMF, and press **RETURN** or **↓**.

4. Use **↑** and **↓** to select CENTERING and press **RETURN**. The cursor moves to the center point between the tab position where the cursor was in (1) and the next tab to the right, or the right margin if there are no more tabs set. A centering symbol “¶” appears on the line. If the text has already been typed, it is automatically centered and you may skip step (5).
- **Short cut:** Instead of (2), (3) and (4), press **CODE** + **F**.
5. Type the text.
6. Press **RETURN** to finish the centering operation, or **TAB** to move to the next tab.
- Centering between a tab and the right margin is possible, but not between the left margin and a tab.
- Centering between a tab and a decimal tab is not possible.

Undoing Centering

While you are still in centering mode, press **CANCEL** to exit the mode (you may also select CENTERING from the menu, or press **CODE** + **F**). To bring a centered text back flush with the left limit of the centering range, position the cursor just after the centering symbol “¶” or “¶” and press **BS** to delete the symbol.

Right Margin Flush



1. If the text to be aligned flush with the right margin has not been typed yet, skip this step. If you want to align text that has been already typed, position the cursor on the first character of that text. If you want to align the whole line, for example, position the cursor on the first characters of the line.
2. Press **MENU** to display the menu.
3. Use **←** and **→** to select CTR/RMF, and press **RETURN** or **↓**.
4. Use **↑** and **↓** to select RIGHT MARGIN FLUSH and press **RETURN**. The cursor moves to the right margin. A right margin flush symbol “¶” appears on the line. If the text has already been typed, it is automatically aligned flush with the right margin (any blank space at the end of the shifted line will be cut off) and you may skip step (5).
- **Short cut:** Instead of (2), (3) and (4), press **CODE** + **R**.
5. Type the text. The cursor will not move, but the text that you type is scrolled to the left.
6. Press **RETURN** to finish the right margin flush operation and bring the cursor to the beginning of the next line.

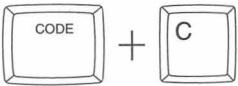
Undoing a Right Margin Flush Format

While you are still in right margin flush mode, press **CANCEL** to exit the mode (you may also select RIGHT MARGIN FLUSH from the menu, or press **CODE** + **R**). To undo an existing right margin flush format, delete the right margin flush symbol "⌞" using **BS**.

Block Operations (BLOCK)

A block can be copied, deleted, or moved to another part of the same document.
A block can also be copied into an entirely different document.

Copying a Block within the Document



1. Position the cursor on the first character of the block you want to copy.
2. Press **MENU** to display the menu.
3. Use **←** and **→** to select BLOCK, and press **RETURN** or **↓**.
4. Use **↑** and **↓** to select COPY and press **RETURN**.
- **Short cut:** Instead of (2), (3) and (4), press **CODE** + **C**.

Move cursor to block end. Press RETURN or to store temporary file press TEMP.

5. Move the cursor to the end of the block to be copied. As you move the cursor, the block is marked (reverse image). You may move the cursor back toward the beginning of the block to unmark. All key combinations used to move the text cursor can be used when marking a block (See “Moving the Text Cursor” on page 33.)
6. When the block to be copied is marked, press **RETURN**.

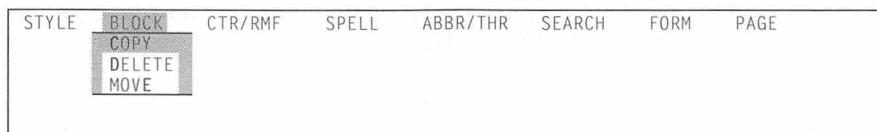
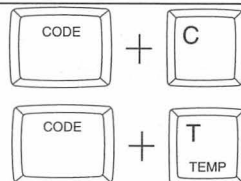
Move cursor to destination for blocked text and press RETURN.

7. Move the cursor to the location where you want to insert the marked block and press **RETURN**. The marked block is automatically copied to that position and the document is reformatted to conform to the modified sections of the document. (See “Formatting Text – Basic Functions” on page 36.)
- *The block is inserted regardless of the current mode (insert or overwrite). This means that the block will never overwrite text at the destination position.*
- *Press **CANCEL** at any step to cancel the function.*
- *Since the block copy operation increases the size of your document, it might happen that you run out of memory. When this happens, the copy operation is canceled and the following message appears:*

Not enough memory remaining.

You must either first delete a portion of the document to free some space, or try to copy only a smaller block.

Copying a Block into a Different File



A portion of the memory is reserved for a temporary file in which you may copy a block of the current document. Later, the contents of the temporary file can be recalled for insertion in the same document or in any other document you are working on. This means that the temporary file can be used to copy a block of text from one file into another file.

You may copy a block stored in the temporary file as many times as you want. Each time you store a new block in the temporary file, you will erase the previous contents of the temporary file.

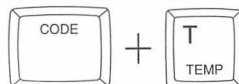
On the other hand, you can recall the contents of the temporary file as many times as you want without altering it.

- *The temporary file is erased after the power is turned off.*
- *The temporary file may contain up to 4 kilobytes (about 4,000 characters).*
- 1. Position the cursor on the first character of the block you want to copy.
- 2. Press **MENU** to display the menu.
- 3. Use **←** and **→** to select BLOCK, and press **RETURN** or **↓**.
- 4. Use **↑** and **↓** to select COPY and press **RETURN**.
- **Short cut:** Instead of (2), (3) and (4), press **CODE** + **C**.

Move cursor to block end. Press RETURN or to store temporary file press TEMP.

5. Move the cursor to the end of the block to be copied. As you move the cursor, the block is marked (reverse image).
 6. When the block is marked, press **CODE** + **T** (**TEMP**) to store the file in temporary memory (DO NOT press **RETURN**). The marked block is now stored as a temporary file.
- Press **CANCEL** at any step to cancel the function.

Recalling the Temporary File



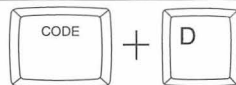
The contents of the temporary file can be recalled and inserted into any file you are working on.

1. Position the cursor on the location where you want to insert the contents of the temporary file.
2. Press **CODE** + **T** (**TEMP**). The following message appears:

You can recall temporary file. To recall temporary file press RETURN.

3. Press **RETURN**. The text stored into the temporary file will now be inserted into the document at the cursor position.

Deleting a Block



STYLE	BLOCK	CTR/RMF	SPELL	ABBR/THR	SEARCH	FORM	PAGE
	COPY						
	DELETE						
	MOVE						

1. Position the cursor on the first character of the block you want to delete.
 2. Press **MENU** to display the menu.
 3. Use **←** and **→** to select **BLOCK**, and press **RETURN** or **↓**.
 4. Use **↑** and **↓** to select **DELETE** and press **RETURN**.
- **Short cut:** Instead of (2), (3) and (4), press **CODE** + **D**.

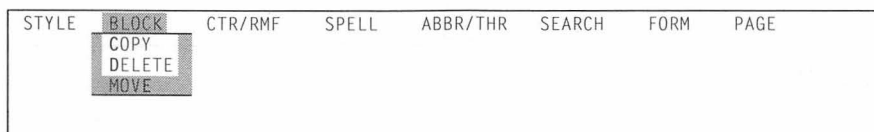
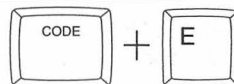
Move cursor to end of block to delete and press RETURN.

5. Move the cursor to the end of the block to be deleted. As you move the cursor, the block is marked (reverse image). You may move the cursor back toward the beginning of the block to unmark. All key combinations used to move the text cursor can be used when marking a block (See "Moving the Text Cursor" on page 33.)
6. When the block to be deleted is marked, press **RETURN**. The machine asks for confirmation:

Are you sure you want to delete? Press RETURN(yes) or CANCEL(no).

- If you press **RETURN**, the block (displayed in reverse image) is deleted, and any text following the block is reformatted to conform to commands in force for that section of the document. (See "Formatting Text – Basic Functions" on page 36.)

Moving a Block



- Position the cursor on the first character of the block you want to move.
 - Press **MENU** to display the menu.
 - Use **←** and **→** to select **BLOCK**, and press **RETURN** or **↓**.
 - Use **↑** and **↓** to select **MOVE** and press **RETURN**.
- Short cut:** Instead of (2), (3) and (4), press **CODE** + **E**.

Move cursor to end of block to move and press RETURN.

- Move the cursor to the end of the block to be moved. As you move the cursor, the block is marked (reverse image). You may move the cursor back toward the beginning of the block to unmark. All key combinations used to move the text cursor can be used when marking a block (See "Moving the Text Cursor" on page 33.)
- When the block to be moved is marked, press **RETURN**.

Move cursor to destination for blocked text and press RETURN.

- Move the cursor to the location where you want to insert the marked block and press **RETURN**. The marked block is automatically transferred to that position and the document is reformatted to conform to the modified section of the document. (See "Formatting Text – Basic Functions" on page 36.)
- The block is inserted regardless of the current mode (insert or overwrite). This means that the block will never overwrite text at the destination position.*
 - Press **CANCEL** at any step to cancel the function.

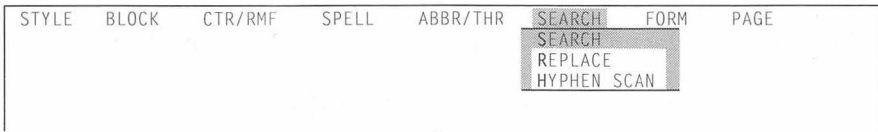
Searching for Text (SEARCH)

In addition to using the cursor keys to move throughout your text, you may find any position in your file quickly by using the search function.

You may automatically scan the document for all occurrences of a specific piece of text (called a “string”) and, at your option, replace all or some of those occurrences with another string. (See “Search and Replace” on page 56.)

A string may be up to 63 characters long, and may include “dead” and superimposed characters. (See “Defining a String” on page 55.)

Search



This function scans the text from the current text cursor position and pauses when the string is found, waiting for you to tell it whether to stop there or proceed to the next.

1. Position the cursor at the beginning of the section that you wish to scan. If you want to scan the entire document, for example, move the cursor to the beginning of the text.
2. Press **MENU** to display the menu.
3. Use **←** and **→** to select **SEARCH**, and press **RETURN** or **↓**.
4. Use **↑** and **↓** to select **SEARCH** and press **RETURN**.



5. Enter the text you are looking for and press **RETURN**.
6. When the first occurrence is found, the following prompt will appear:



7. If this is the place you are looking for, press **CANCEL** and do the necessary editing. If you wish to proceed to the next occurrence, press **RETURN** to continue the search.
- *When there are no more occurrences, the following message appears, and will automatically disappear when you press a key.*

Word(s) not found.

8. Resume normal operation or go back to step (1) to search for another string – or for the same string again. Since the search string remains in memory until you define another or turn the power off, you will not have to re-enter it in step (5) when you search repeatedly for the same string, and exit to make changes.

Defining a String

- *The 63-character limit refers to the number of characters you see on the screen. An accented character (made with a dead key) or superimposed characters (made with a permanent backspace) count as a single character even if it takes two or more keystrokes to type.*
- *The search function distinguishes between upper and lower case letters. For example, if you specify "ALPHA", it will not stop at "alpha" or "Alpha".*
- *Each space that you type (with (SPACE BAR)) in the string counts as one character.*
- *The string input area initially appears as a continuous underline. Everything before the trailing underline is considered part of the string. The string shown below, for example, is five characters long because it ends with two spaces.*

Type search word(s). Press RETURN to start search.
SEARCH :AAA

- *The search function stops at every string that matches the specified string, even if the match is inside a word. If the specified string is "at", it stops at "at" of "hat", "attention", etc. If you wish to search only for the word "at", specify "_at_", leaving a space on each side of the word.*
- *The search function ignores "soft spaces" that are added by the justify function and hyphens other than permanent ones.*
- *The search string cannot contain attributes such as bold, underline, subscript, or superscripts because the search function ignores them. If you specify "A2", it stops at "A2", "A₂", "A²" – and all combinations with bold and underline as well.*
- *Pressing (CANCEL) during string input deactivates the search function, but the string remains in memory until you define another, or turn the power off.*

Search and Replace

STYLE	BLOCK	CTR/RMF	SPELL	ABBR/THR	SEARCH	FORM	PAGE
					SEARCH		
					REPLACE		
					HYPHEN SCAN		

The search and replace function is just the search function with the option of replacing some or all occurrences with another text string.

The system automatically reformats your document if the replacement is not the same length as the original.

1. Position the cursor at the beginning of the section that you wish to scan. If you want to scan the entire document, for example, move the cursor to the beginning of the text.
2. Press **MENU** to display the menu.
3. Use **←** and **→** to select SEARCH, and press **RETURN** or **↓**.
4. Use **↑** and **↓** to select REPLACE and press **RETURN**.

Type search and replace word(s). Press ↑, ↓ to select. RETURN to start search.
SEARCH :
REPLACE:

5. Enter both the text that you wish to look for and the replacement. Use **↑** and **↓** to shift between the two input areas and press **RETURN** when input is completed.

Global? Press RETURN(yes) or TAB(no).

6. If you press **RETURN**, all occurrences from the cursor position to the end of the document will be automatically replaced. When the function has been completed, the cursor will move to the end of the file and return to the normal edit mode. To stop the function in progress, press **CANCEL**.
If you press **TAB**, it will stop at the first occurrence and this message will appear:

Press RETURN to replace word(s), TAB not to replace word(s), CANCEL to exit.

7. To replace this occurrence, press **RETURN**. The system carries out the change, then stops at the next occurrence and displays the above message again.
To search for the next occurrence without replacing, press **TAB**. The system stops at the next occurrence and displays the above message again.

To stop searching and return to the normal edit mode, press **CANCEL**. If you mistakenly press this key, you may re-start from step (1). Since the search and replace strings remain in memory until you define others, you will not have to re-enter them in step (5).

- *When there are no more occurrences, the following message appears, and will automatically disappear when you press a key.*

Word(s) not found.

- *If you repeatedly replace strings with longer ones in a very long document, you may run out of memory. In such a case, the function is canceled and the following message appears:*

Memory full.

- *The message will remain until you delete some portion of the document to free some memory space.*

Hyphen Scan

STYLE	BLOCK	CTR/RMF	SPELL	ABBR/THR	SEARCH	FORM	PAGE
					SEARCH		
					REPLACE		
					HYPHEN SCAN		

A problem arises with the word wrap function when the distance between margins is small, or when typing a text in languages like German using very long words. Since the word wrap function automatically transfers a word that cannot fit in the current line to the next line, excessively long blank spaces may appear, resulting in a poor layout.

The hyphen scan function automatically detects such long blank spaces and gives you a chance to hyphenate the long words. It allows you to type your text without making any manual hyphenations (except, a permanent hyphen).

1. After your text is typed, position the cursor at the beginning of the section that you wish to scan. If you want to scan the entire document, for example, move the cursor to the beginning of the text.
2. Press **MENU** to display the menu.
3. Use **←** and **→** to select **SEARCH**, and press **RETURN** or **↓**.
4. Use **↑** and **↓** to select **HYPHEN SCAN** and press **RETURN**.

5. The hyphen scan function will scan your text down from the cursor position and search for lines containing blank spaces longer than the six columns of the hot zone. The position where a hyphen should be inserted appears in reverse color. The following message appears:

Move cursor, press RETURN to hyphenate, TAB to continue, CANCEL to exit.

6. If you want to hyphenate this word, position the cursor at the most suitable position and press **RETURN**. The word will be hyphenated and the portion of the word to the left of the hyphen will be transferred to the previous line. The hyphen scan function will search for the next occurrence of a long blank space.
If you want to skip this occurrence and keep the word without a hyphen, press **TAB**. The hyphen scan function will search for the next occurrence of a long blank space.
Press **CANCEL** if you want to terminate the hyphen scan function.

Spell Check System (SPELL)

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SPELL is used for automatic detection of errors (Spell Checker) and includes the tools you need to work with personal "user dictionaries". The Spell Checker can be used in the "ALL" mode to check the entire document, or in the "ONE WORD" mode to check the words while you are typing them.

Understanding the Spell Checker

The Spell Checker is a powerful tool for increasing your proofreading efficiency. The Spell Checker comes with a built-in dictionary of about 70,000 English words. When checking your text, the Spell Checker automatically compares each word with the contents of the dictionary. If a word is not found in the dictionary, the machine assumes that the word in question is misspelled and warns you.

The built-in dictionary contains only standard English words and will consider words like brand names, people's names, or foreign language words as misspelled words, even if those words are perfectly correct. If you are frequently using such words in your document, you should create a "User Dictionary" and store those words in that dictionary. The user dictionary is kept in the memory and you may save it on diskette. When a word cannot be found in the built-in dictionary, the Spell Checker will scan the user dictionary and warn you only if the word cannot be found there.

When a word cannot be found in either dictionary, the Spell Checker gives you a menu of options:

- You may IGNORE the warning and keep the suspect word unchanged.
- You may ask for SUGGESTIONS. In this case, the Spell Checker will supply possible replacement word(s) for the suspect word.
- You may also directly RETYPE the word correctly. This option is used when the error is evident and easy to correct, or when the system cannot provide the correct suggestion.
- You may ADD the suspect word to the user dictionary. This is useful when the suspect word, although correct, is not a standard English word. Once the word is stored in the user dictionary, the Spell Checker will not warn you the next time the same word is found.

The Spell Checker also detects redundant words (you typed the same word twice). When this happens, a menu of options appears:

- You may IGNORE the warning and keep the repeated word in the text.
- You may automatically ERASE the SECOND WORD.

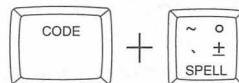
Important Notice

This system is not a replacement for careful proofreading of your documents. It has no way of knowing, for example, whether words are missing or whether a given word is appropriate for the current syntactic or semantic context. If you type "teh" instead of "the", the spell checker alerts you because "teh" is not a valid English word, but if you type "one" instead of "on", it does not consider it a mistake.

Checking Existing Text – ALL

You may automatically scan the entire document for problems. The scan is unidirectional, that is, it starts at the word where the cursor is currently located and works toward the end of the document.

Activating the System



STYLE	BLOCK	CTR/RMF	SPELL	ABBR/THR	SEARCH	FORM	PAGE
			SPELL CHECK				
			USER DICTIONARY MAINTENANCE				
			USER DICTIONARY LOAD				
			USER DICTIONARY SAVE				

1. Position the cursor at the location of the document where you want to start checking. For example, if you want to check the entire document, position the cursor over the first word of the document.
2. Press **MENU** to display the function menu.
3. Use **←** and **→** to select **SPELL**, then press **↓** or **RETURN** to display the sub-menu.
4. Use **↑** and **↓** to select **SPELL CHECK** and press **RETURN**. The following menu appears:

Use cursor to select. Press RETURN.

ALL ONE WORD

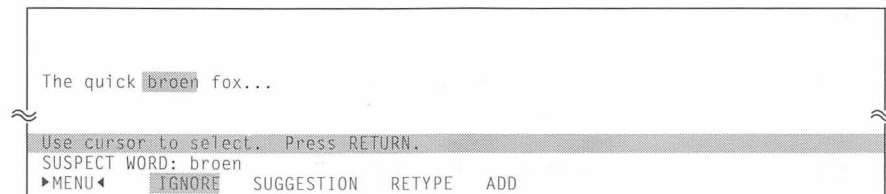
- **Short cut:** Instead of (2), (3) and (4), press **CODE** + **SPELL**.
5. Use **←** and **→** to select **ALL** and press **RETURN**. The Spell Checker starts scanning your text for misspelled word and displays the message:

Checking....

While Checking (Suspect & Redundant Words)

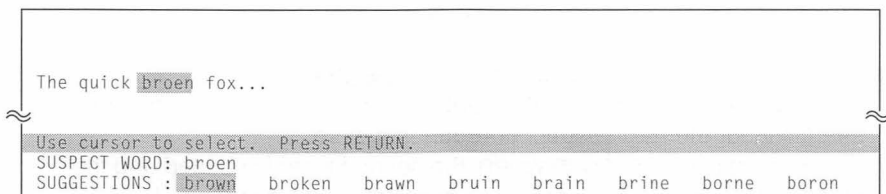
When a suspect or redundant word is found, the above message disappears and is replaced with a menu of options. The suspect word or redundant word appears in reverse color in the text.

Example 1: Let's suppose that you have typed "The quick broen fox..." ("broen" is suspect)



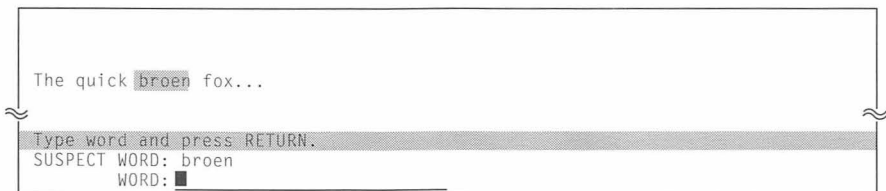
Use **←** and **→** to select an option and press **RETURN**.

1. If you select IGNORE, the system start searching for the next suspect word. The word "broen" will not be corrected.
2. If you selected SUGGESTION, a menu of possible replacement words appears.



Use **←** and **→** to select the correct word and press **RETURN**. The correct word will automatically replace the wrong one in the text and the system starts searching for the next suspect word. If the correct word does not appear in the suggestion menu, press **CANCEL** to return to the first menu and select RETYPE as explained below.

3. If you select RETYPE, an input area appears so that you can type the correct word:



You may type the correct word and press **RETURN**. The retyped word replaces the wrong one in the text and the system starts searching for the next suspect word.

You may also press **↓** first. This will display the suspect word in the input area so that you can correct it in a few keystrokes. Press **RETURN** when the word is corrected.

4. If you select **ADD**, the suspect word is added to the user dictionary. From now on, it will not be considered suspect any more. The following message appears:

Word added to user dictionary.

Example 2: Let's now suppose that you have typed "The quick brown fox fox..." (the second "fox" is redundant)

The quick brown fox fox...

Use cursor to select. Press RETURN.
REDUNDANT WORD: fox
▶MENU ◀ **IGNORE** ERASE SECOND WORD

Use **←** and **→** to select an option and press **RETURN**.

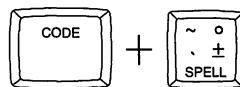
1. If you select **IGNORE**, the word is kept in the text and the system starts searching for the next suspect or redundant word.
2. If you select **ERASE SECOND WORD**, the second word is deleted and the system starts searching for the next suspect or redundant word.

The process repeats until the end of the document (a message will tell you that you reached the end of the document) or until you press **CODE** + **SPELL** or **CANCEL** to turn the Spell Check off.

Checking While Typing – ONE WORD

The Spell Checker can be used to check each word as you type.

Activating the System



Refer to “Activating the System” on page 60. The only differences between the “One Word” procedure and the “All” procedure are: 1) you must first position the cursor at the location where you are going to type, and 2) when the option menu “ALL ONE WORD” appears, you must select ONE WORD. The Spell Checker will be automatically activated.

Once the Spell Checker is activated, the SPELL indicator appears on the screen. The words you type are checked for spelling error or redundancy. If an error is found, the system interrupts your typing and displays a menu of options. See “While Checking (Suspect & Redundant Words)” on page 61 for details.

- To disable the Spell Checker, press  + .

Understanding the User Dictionary

A user dictionary is created automatically when you select the ADD function to add a word to the dictionary and will be kept in the memory as a separate file. The memory can hold only one user dictionary file, but this file can be saved on a diskette. You can then delete the current user dictionary and start creating a new one. A user dictionary file that is saved on a diskette can be loaded back into the memory.

- Remember that the user dictionary will be deleted from the memory if you remove the lithium battery while the power is off, or if the lithium battery dies.
- The memory of the machine can hold only one dictionary. If you create a dictionary in the memory, and then load a dictionary from a diskette, the dictionary currently in the memory will be overwritten by the loaded dictionary.
- A diskette can hold only one dictionary. If you save a dictionary on a diskette that already contains one, the new dictionary will automatically overwrite the old one. Use different diskettes to save different dictionaries.
- The capacity of the user dictionary is limited to about 204 words of seven characters.

User Dictionary Maintenance

STYLE	BLOCK	CTR/RMF	SPELL	ABBR/THR	SEARCH	FORM	PAGE
<div>SPELL CHECK USER DICTIONARY MAINTENANCE USER DICTIONARY LOAD USER DICTIONARY SAVE</div>							

Beside the ADD option that allows you to add a suspect word to the user dictionary, the Spell Check system provides you with special tools for direct editing of the user dictionary.

1. Press **MENU** to display the function menu.
2. Use **←** and **→** to select **SPELL**, then press **↓** or **RETURN** to display the sub-menu.
3. Use **↑** and **↓** to select **USER DICTIONARY MAINTENANCE** and press **RETURN**. The following display appears.

<< USER DICTIONARY >>	TOTAL WORDS:XXX	INS SHIFT	10:24AM
Alfred	Benoit		
Cathy	Packard		
WP	XTY123		
To add, type word. Press MENU for other options. Press FILE to finish.			
ADD: █			

4. To add a new word, type it and press **RETURN**. The new word will be inserted in the list in alphabetical order. The system will tell you if you try to input a word that already exists in the user dictionary.
- *On the User Dictionary screen, the keyboard is automatically set to KB:I.*
5. To return to normal typing, press **CODE** + **MENU** (**FILE**).

Using the Function Menu for other Options



EXIT	DELETE	ALL DELETE	LOAD	SAVE
Alfred	Benoit			
Cathy	Packard			
WP	XTY123			
Select from menu and press RETURN.				

- To select a word, use **↑**, **↓**, **CODE** + **↑** (**PRES**), or **CODE** + **↓** (**NEXT S**).
- You may also press **CODE** + **G** (**GO TO**) to go closer to the word that you want to select. A message will ask you to enter the first letter of the word:

Type letter to move cursor.

Type the letter.

1. From the USER DICTIONARY screen, press **MENU** to display a menu of functions:
- To select a function from the menu, use **←** and **→** and press **RETURN** or type the letter displayed in bold.
2. To exit the user dictionary maintenance screen, select EXIT and press **RETURN**.
- **Short cut:** To exit without displaying the menu, press **CODE** + **MENU** (**FILE**).
3. To delete a word, first select the word from the user dictionary screen. Press **MENU**, select DELETE and press **RETURN**. The following message appears:

Delete the word from user dictionary? Press RETURN(yes) or CANCEL(no).

- **Short cut:** To enable the delete function without displaying the menu, press **CODE** + **D**.
Press **RETURN** to delete, or **CANCEL** to keep the word in the user dictionary.
- 4. To delete all words, select ALL DELETE and press **RETURN**. The following message appears:

Delete all words in user dictionary? Press RETURN(yes) or CANCEL(no).

- Press **RETURN** to delete, or **CANCEL** to keep the user dictionary unchanged.
5. To load a different user dictionary file from a different diskette, insert the diskette in the drive, select LOAD and press **RETURN** to load the user dictionary.
 - **Short cut:** To enable the LOAD function without displaying the menu, press **CODE** + **L**.
 - If there is a user dictionary in the memory, this message appears:

User dictionary already exists. Press RETURN to overwrite.

Press **RETURN** to overwrite or **CANCEL** to quit. Remember that loading a user dictionary file will overwrite the user dictionary currently in memory.

6. To save the user dictionary, insert a diskette in the drive, select SAVE and press **RETURN**. This message will appear:

Press RETURN to save.

Press **RETURN**. Remember that saving the user dictionary onto a diskette which already contains a user dictionary file will overwrite that file on the diskette.

The file will be saved under the file name SPELLUSR.DCT.

- **Short cut:** To enable the SAVE function without displaying the menu, press **CODE** + **S**.

Loading a User Dictionary

The Spell Check system allows you to have several user dictionaries, but you cannot store more than one on the same diskette. This feature is very useful when you are dealing with different kinds of documents. For example, if the documents you have to create most frequently are letters (containing people's names) and sales reports (containing company names) you may store these two kinds of documents on different diskettes, and create the corresponding user dictionary on each diskette.

- *If you are using the Spell Checker for the first time, your diskette does not contain any user dictionary file and you will not be able to load anything.*

If you want to reuse an existing user dictionary, first insert the corresponding diskette in the disk drive.

STYLE	BLOCK	CTR/RMF	SPELL	ABBR/THR	SEARCH	FORM	PAGE
			SPELL CHECK				
			USER DICTIONARY MAINTENANCE				
			USER DICTIONARY LOAD				
			USER DICTIONARY SAVE				

1. Press **MENU** to display the function menu.
2. Use **←** and **→** to select SPELL, then press **↓** or **RETURN** to display the sub-menu.
3. Use **↑** and **↓** to select USER DICTIONARY LOAD and press **RETURN**. The loaded file replace the User Dictionary in the memory.
- *If there is a user dictionary in the memory, this message appears:*

User dictionary already exists. Press RETURN to overwrite.

Press **RETURN** to overwrite or **CANCEL** to quit. Remember that loading a user dictionary file will overwrite the user dictionary currently in memory.

Saving the User Dictionary

STYLE	BLOCK	CTR/RMF	SPELL	ABBR/THR	SEARCH	FORM	PAGE
			SPELL CHECK				
			USER DICTIONARY MAINTENANCE				
			USER DICTIONARY LOAD				
			USER DICTIONARY SAVE				

1. Press **MENU** to display the function menu.
2. Use **←** and **→** to select SPELL, then press **↓** or **RETURN** to display the sub-menu.
3. Use **↑** and **↓** to select USER DICTIONARY SAVE and press **RETURN**. This message will appear:

Press RETURN to save.

4. Press **RETURN** to save the user dictionary on the diskette.
The file will be automatically saved under the file name SPELLUSR.DCT. Remember that saving the user dictionary onto a diskette which already contains a user dictionary file will overwrite that file on the diskette.

Abbreviated Phrases and Thesaurus (ABBR/THR)

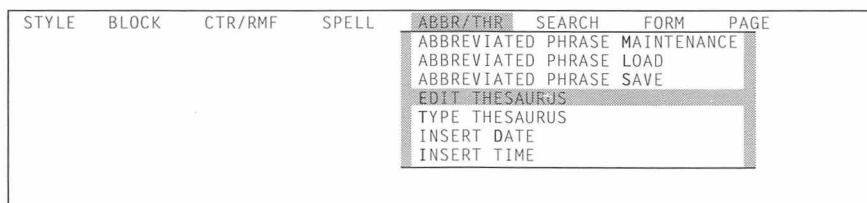
ABBR/THR is used to improve the style of your documents and your typing speed. It includes two thesaurus functions, the EDIT THESAURUS which provides synonyms for a word already typed, and the TYPE THESAURUS which will provide synonyms for a word that you specify. ABBR/THR also includes functions that allow you to create and retrieve "phrases", that is, combinations of words often used in your documents. Once created, these phrases can be quickly inserted in your documents by typing a short abbreviation.

Thesaurus

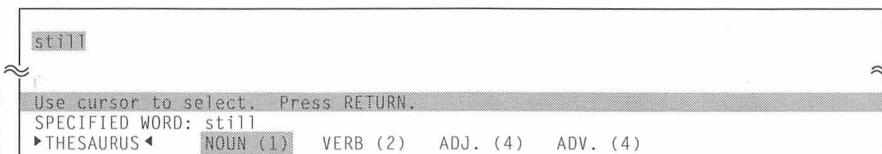
The Thesaurus is a useful feature that allows you to search for synonyms for the word you specify, and replace the selected word with a synonym if you desire. The Thesaurus contains 45,000 words.

There are two ways to enter the Thesaurus mode: EDIT THESAURUS gives synonyms for the word the cursor is on, while TYPE THESAURUS waits until you type a word and then gives a list of synonyms for that word.

Edit Thesaurus



1. Position the cursor on the word that you want to replace with a synonym. (Let's assume that the word the cursor is on is "still".)
2. Press **MENU** to display the function menu.
3. Use **←** and **→** to select ABBR/THR and press **↓** or **RETURN** to display the sub-menu.
4. Use **↑** and **↓** to select EDIT THESAURUS and press **RETURN**.
5. After a while, the following menu appears:



- This menu means that the system found synonyms for the word “still” in four syntactic categories (nouns, verbs, adjectives, and adverbs). The same categories will, of course, not necessarily be displayed with any specified word. The number at the right of each category indicates the number of semantic classes into which that category is subdivided. For instance, VERB(2) means that you will find two lists of verbs that are synonyms of the word “still”. By definition, synonyms are words with (almost) the same meaning. You will find, however, that words belonging to the same semantic class are closer to each other than words from different semantic classes in the same syntactic category.
- If there is no synonym for the specified word, the following message appears:

Synonym not found.

6. Use **←** and **→** to select the category and press **RETURN**. Press **CANCEL** to exit the function. Let's assume that you selected VERB(2). The following menu appears:

```

still
Use cursor to select. Press RETURN.
SPECIFIED WORD: still
VERB1      : silence  quiet  shut up  hush  shush

```

7. Use **←** and **→** to select a word. If the complete list cannot fit in the display, the same keys will scroll the list. If there are more than one semantic class, use **↑** and **↓** to display the other classes.

```

still
Use cursor to select. Press RETURN.
SPECIFIED WORD: still
VERB2      : settle  compose  calm  soothe  quiet  lull  allay

```

8. Press **RETURN** to replace the specified word with the selected synonym, or press **CANCEL** to return to the first menu and select another syntactic category, or exit the function without replacing the specified word by pressing **CANCEL** again. If you select a synonym and press **RETURN**, the synonym replaces the current word.

Type Thesaurus

STYLE	BLOCK	CTR/RMF	SPELL	ABBR/THR	SEARCH	FORM	PAGE
				ABBREVIATED PHRASE	MAINTENANCE		
				ABBREVIATED PHRASE	LOAD		
				ABBREVIATED PHRASE	SAVE		
				EDIT THESAURUS			
				TYPE THESAURUS			
				INSERT DATE			
				INSERT TIME			

1. Press **MENU** to display the function menu.
2. Use **←** and **→** to select ABBR/THR and press **↓** or **RETURN** to display the sub-menu.
3. Use **↓** and **↑** to select TYPE THESAURUS and press **RETURN**. The system asks you to type the word for which a synonym is needed:

Type word and press RETURN.
SPECIFIED WORD: <input type="text"/>

4. Type the word and press **RETURN**.
5. From this point, proceed as you would do with the EDIT THESAURUS option (See "Edit Thesaurus" on page 68, steps 5 to 8)

Increasing Your Typing Speed with Abbreviated Phrases



The abbreviated phrase function is provided to help you increase your typing speed when you have to frequently type long strings of words ("phrases"). You may store the phrases in the abbreviated phrase memory, along with a short abbreviation (the "name" of the phrase). For instance, you may store the phrase "United States of America" together with the name "USA". Once this has been done, all you have to do to enter "United States of America" in your document is to type "USA" and press **CODE** + **A** (**ABBR**). "USA" will automatically be replaced with "United States of America". If you type a name that does not exist in the abbreviated phrase memory, and press **CODE** + **A** (**ABBR**), you will hear a beep.

The abbreviated phrase memory can store a maximum of 30 phrases and names. Each phrase can consist of up to 67 characters, while a name is limited to 8 characters. The total amount of data in the abbreviated phrase memory may not exceed 1,000 characters.

The abbreviated phrase memory can be saved on diskette and, of course, retrieved from the diskette. You may create as many abbreviated phrase files as you want, but, as was the case for user dictionary files, you may have only one abbreviated phrase file on a diskette.

Abbreviated Phrase Maintenance

STYLE	BLOCK	CTR/RMF	SPELL	ABBR/THR	SEARCH	FORM	PAGE
				ABBREVIATED PHRASE MAINTENANCE			
				ABBREVIATED PHRASE LOAD			
				ABBREVIATED PHRASE SAVE			
				EDIT THESAURUS			
				TYPE THESAURUS			
				INSERT DATE			
				INSERT TIME			

This section explains how to input and edit data in the abbreviated phrase memory.

1. Press **MENU** to display the function menu.
2. Use **←** and **→** to select ABBR/THR, then press **↓** or **RETURN** to display the sub-menu.
3. Use **↑** and **↓** to select ABBREVIATED PHRASE MAINTENANCE and press **RETURN**. The following display appears:

<< ABBREVIATED PHRASE >>	KB:X	INS	SHIFT	10:22AM
To add, type phrase. To edit, press RETURN. For other options, press MENU. _____ : _____				

4. To enter new data, type the name, press **TAB** or **→** to switch to the phrase area, then type the phrase and press **RETURN**.
 - *Use only letters, numbers and periods for the name.*
5. To edit an existing line of data, select the line with **↑** and **↓**, then press **RETURN**. The data will appear in the input area. Edit the data, then press **RETURN** again.
6. To return to the INPUT/EDIT screen and resume typing, press **CODE** + **MENU** (**FILE**) or select EXIT from the menu.

Using a Phrase

1. On the Input/Edit screen, type the phrase name.
2. Press **CODE** + **A** (**ABBR**) to recall the phrase text.

Using the Function Menu for other Options



EXIT	PRINT	DELETE	LOAD	SAVE
ts : Tom Smith				
tw : typewriter				
USA : United States of America				
Select from menu and press RETURN.				

- From the ABBREVIATED PHRASE screen, press **MENU** to display a menu of functions:
 - To select a function from the menu, use **←** and **→** or type the letter displayed in bold.
 - When the menu is displayed, it is not possible to select a line of data.
- To exit the abbreviated phrase maintenance screen and return to the INPUT/EDIT screen, select EXIT and press **RETURN**.
 - Short cut:** To exit without displaying the menu, press **CODE** + **MENU** (**FILE**) or **CANCEL**.
- To print the list of phrases and names, select PRINT and press **RETURN**.
 - Short cut:** To print without displaying the menu, press **CODE** + **P** (**PRINT**).
- To delete a line of data, you must select the data before you display the function menu. When the data to be deleted is selected, press **MENU**, then select DELETE and press **RETURN**. A message will ask for confirmation:

Are you sure you want to delete? Press RETURN(yes) or CANCEL(no).

- Short cut:** To delete without displaying the menu, press **CODE** + **D**. Press **RETURN** to delete the line or **CANCEL** to keep it in memory.
- To load an abbreviated phrase file, insert the diskette, select LOAD and press **RETURN** to load the abbreviated phrase file.
 - Short cut:** To load without displaying the menu, press **CODE** + **L**.
 - If there is an abbreviated phrase file in the memory, this message appears:

Abbreviated phrase memory already exists. Press RETURN to overwrite.

Press **RETURN** to overwrite or **CANCEL** to quit.

Remember that loading an abbreviated phrase file will overwrite the abbreviated phrase file currently in memory.

6. To save the abbreviated phrase memory, insert a diskette, select SAVE and press **RETURN**. This message will appear:

Press RETURN to save.

Press **RETURN** to save the file under the file name ABBR.PHR. Remember that saving the abbreviated phrase memory onto a diskette that already contains an abbreviated phrase file will overwrite the file on that diskette.

- **Short cut:** To save without displaying the menu, press **CODE** + **S**.

Loading an Abbreviated Phrase File

STYLE	BLOCK	CTR/RMF	SPELL	ABBR/THR	SEARCH	FORM	PAGE
				ABBREVIATED PHRASE MAINTENANCE			
				ABBREVIATED PHRASE LOAD			
				ABBREVIATED PHRASE SAVE			
				EDIT THESAURUS			
				TYPE THESAURUS			
				INSERT DATE			
				INSERT TIME			

1. Insert the diskette which contains the abbreviated phrase file that you want to use.
2. Press **MENU** to display the function menu.
3. Use **←** and **→** to select ABBR/THR, then press **↓** or **RETURN** to display the sub-menu.
4. Use **↑** and **↓** to select ABBREVIATED PHRASE LOAD and press **RETURN**. The abbreviated phrase file is loaded into the abbreviated phrase memory and you can now use the abbreviated phrases as explained above.
- If there is an abbreviated phrase file in the memory, this message appears:

Abbreviated phrase memory already exists. Press RETURN to overwrite.

Press **RETURN** to overwrite or **CANCEL** to quit. Remember that loading an abbreviated phrase file will overwrite the abbreviated phrase file currently in memory.

Saving the Abbreviated Phrase Memory

STYLE	BLOCK	CTR/RMF	SPELL	ABBR/THR	SEARCH	FORM	PAGE
				ABBREVIATED PHRASE	MAINTENANCE		
				ABBREVIATED PHRASE	LOAD		
				ABBREVIATED PHRASE	SAVE		
				EDIT THESAURUS			
				TYPE THESAURUS			
				INSERT DATE			
				INSERT TIME			

1. Insert the diskette on which you want to save the abbreviated phrase memory.
2. Press **MENU** to display the function menu.
3. Use **←** and **→** to select ABBR/THR, then press **↓** or **RETURN** to display the sub-menu.
4. Use **↑** and **↓** to select ABBREVIATED PHRASE SAVE and press **RETURN**. This message will appear.

Press RETURN to save.

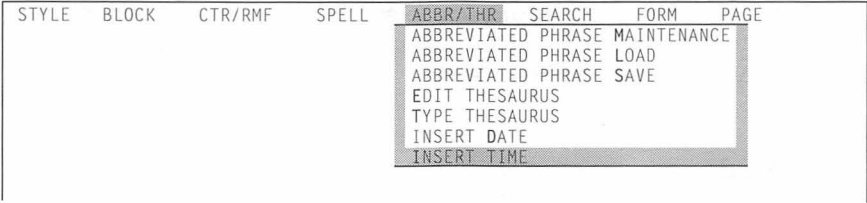
5. Press **RETURN** to save the abbreviated phrase memory on the diskette under the filename ABBR.PHR and overwrite the abbreviated phrase on diskette if such a file was already stored on the diskette.

Inserting the Date

STYLE	BLOCK	CTR/RMF	SPELL	ABBR/THR	SEARCH	FORM	PAGE
				ABBREVIATED PHRASE	MAINTENANCE		
				ABBREVIATED PHRASE	LOAD		
				ABBREVIATED PHRASE	SAVE		
				EDIT THESAURUS			
				TYPE THESAURUS			
				INSERT DATE			
				INSERT TIME			

1. Press **MENU** to display the function menu.
2. Use **←** and **→** to select ABBR/THR, then press **↓** or **RETURN** to display the sub-menu.
3. Use **↑** and **↓** to select INSERT DATE and press **RETURN**. This will insert the current date into your document at the cursor position.
 - The date will be inserted into the document even if the INS indicator is not on (the function never overwrites text).
 - The date will be formatted according to the TIME SETTING of the Clock mode (month/day/year or day/month/year). For more details, see "Setting the Time" on page 259.
 - The date can be inserted in CENTERING, RIGHT MARGIN FLUSH and DECIMAL TAB modes, but not in HEADER or FOOTER. The keyboard setting will be the same as for the surrounding text.

Inserting the Time



1. Press **MENU** to display the function menu.
2. Use **←** and **→** to select ABBR/THR, then press **↓** or **RETURN** to display the sub-menu.
3. Use **↑** and **↓** to select INSERT TIME and press **RETURN**. This will insert the current time into your document at the cursor position.
 - *The time will be inserted into the document even if the INS indicator is not on (the function never overwrites text).*
 - *The time will be formatted according to the TIME SETTING of the Clock mode (e.g. 13:30 or 1:30PM). For more details, see “Setting the Time” on page 259.*
 - *The time can be inserted in CENTERING, RIGHT MARGIN FLUSH and DECIMAL TAB modes, but not in HEADER or FOOTER. The keyboard setting will be the same as for the surrounding text.*

Paper and Screen Settings (FORM)

The FORM option of the menu allows you to specify several layout parameters related to the vertical distribution of text on the paper. It also allows you to display simultaneously two documents on screen.

Paper Size

STYLE	BLOCK	CTR/RMF	SPELL	ABBR/THR	SEARCH	FORM	PAGE
						PAPER SIZE	
						HEADER	
						FOOTER	
						SCALE LINE ON/OFF	
						DUAL SCREEN	
						CHANGE SCREEN	

When typing, your text will be automatically divided into pages according to the layout of your page. The paper size function will allow you to set the size of your top and bottom margins and other layout parameters. Once typing has reached the bottom of a page, a page break symbol appears on the screen to indicate the end of the page. If you wish to end a page prior to the automatic page ending, you may do so by inserting a page break (see "Page Breaks" on page 82).







1. Press **MENU** to display the menu.
2. Use **←** and **→** to select FORM, and press **RETURN** or **↓**.
3. Use **↑** and **↓** to select PAPER SIZE and press **RETURN**.
4. The "paper size screen" shown below appears.

XXXXXXXX		P:XX	L:XXX	COL:XXX	KB:X	12:30PM	
				TOP MARGIN 6			
				HEADER 0			
				TOP SPACE 0			
PAPER SIZE 66 (LINES)				TEXT AREA 54			
				BOTTOM SPACE 0			
				FOOTER 0			
				BOTTOM MARGIN 6			
Set each item and press ↑ ↓ . Press RETURN to finish.							

- The text cursor cycles through only five of the eight fields on the screen. HEADER, FOOTER and TEXT AREA are automatically updated by the machine. The numbers for HEADER and FOOTER are automatically set to 1 line if you store a header or footer, or 0 lines if there is no header or footer. The length of the TEXT AREA is defined as the PAPER SIZE less the lines reserved for TOP MARGIN, HEADER, TOP SPACE, BOTTOM SPACE, FOOTER, and BOTTOM MARGIN.

Paper size settings

Indication	Meaning
PAPER SIZE	The total length of the paper. The default, 66 lines, is suitable for letter-size paper. (70 lines for A4 size paper.)
TOP MARGIN	The distance between the top edge of the paper and the header (if present) or the top of the text (when there is no header). The default is 6 lines.
HEADER	An optional running header. (See "Header and Footer" on page 78.)
TOP SPACE	The distance between the header (if present) and the first line of the text. If you stored a header, you will want to enter a number for this selection.
TEXT AREA	The number of lines reserved for the body of the text.
BOTTOM SPACE	The distance between the last line of the text and the footer (if present). If you stored a footer, you will want to enter a number for this selection.
FOOTER	An optional running footer. (See "Header and Footer" on page 78.)
BOTTOM MARGIN	The distance between the footer (if present) or the last line of the text and the bottom edge of the paper. The default is 6 lines.

5. Press  or  until you reach the parameter that you wish to change.
 6. Type the new value and press  or  to move to the next parameter that you want to change. Notice how the text area value will change to accommodate your selections.
 7. When all the desired changes have been entered, press . Alternatively, press  to return without storing the new settings.
- Your text will be divided into pages automatically according to the settings for the paper size. If you wish to begin a new page prior to reaching the line set by the paper size setting, insert a page break. (See "Page Breaks" on page 82.)

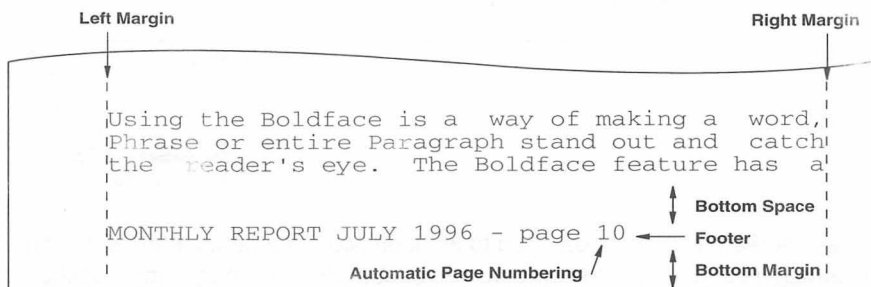
Header and Footer

STYLE	BLOCK	CTR/RMF	SPELL	ABBR/THR	SEARCH	FORM	PAGE
						PAPER SIZE	
						HEADER	
						FOOTER	
						SCALE LINE ON/OFF	
						DUAL SCREEN	
						CHANGE SCREEN	

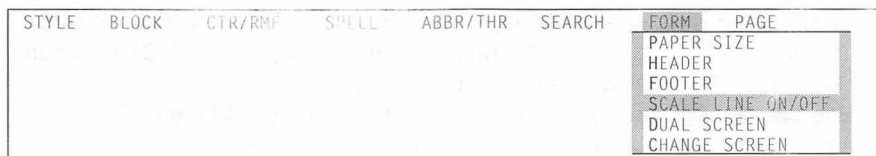
STYLE	BLOCK	CTR/RMF	SPELL	ABBR/THR	SEARCH	FORM	PAGE
						PAPER SIZE	
						HEADER	
						FOOTER	
						SCALE LINE ON/OFF	
						DUAL SCREEN	
						CHANGE SCREEN	

A header is a title line and/or page number that will be automatically printed at the top of every page. A footer is a similar line at the bottom of the page.

1. Press **MENU** to display the menu.
 2. Use **←** and **→** to select FORM, and press **RETURN** or **↓**.
 3. Use **↑** and **↓** to select HEADER or FOOTER, and press **RETURN**.
 4. Type the header or footer and press **RETURN**. The text of the header or footer cannot exceed one line. It will disappear from the screen when **RETURN** is pressed, but will print on the line determined by the paper size setting when the text is printed.
- *As mentioned before, entering a header or footer automatically updates the setting of the PAPER SIZE screen. You may wish to insert a few lines for a top space or bottom space on the PAPER SIZE screen in order to separate the body of the text from the header or footer.*
 - *You may have page numbering automatically included in the header or footer. If you type a number enclosed in double quotes, this number will be incremented for each page when printed. (The double quotes are not printed.) You may begin with number 1 or with a different number if needed. Any number up to four digits in length (9999) is accepted.*
 - *Example of footer with page numbering:*
MONTHLY REPORT JULY 1996 - page "10"
 - *Printing effects (BOLD and UNDERLINE) can also be used with a header and footer. You may also center the header or footer or make it flush to the right margin.*



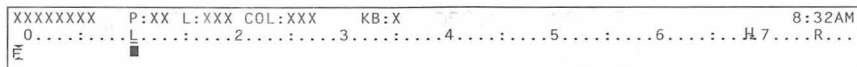
Disabling the Scale



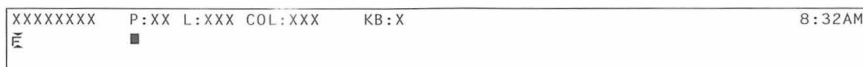
Disabling the scale makes an additional line of the screen available for your text.

1. Press **MENU** to display the menu.
2. Use **←** and **→** to select FORM and press **RETURN** or **↓**.
3. Use **↑** and **↓** to select SCALE LINE ON/OFF and press **RETURN**. You are back to the INPUT/EDIT screen. If the scale was displayed, it is now disabled, and vice-versa.

THE INPUT/EDIT Screen with the Scale ON



The INPUT/EDIT Screen with the Scale OFF



Displaying two Documents

STYLE	BLOCK	CTR/RMF	SPELL	ABBR/THR	SEARCH	FORM	PAGE
						PAPER SIZE	
						HEADER	
						FOOTER	
						SCALE LINE ON/OFF	
						DUAL SCREEN	
						CHANGE SCREEN	

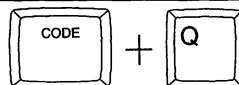
The dual screen function allows you to work on two documents at the same time. This function can be used to compare two documents. You may copy a section of the top file to the bottom file, or vice-versa. (See "Copying a Block into a Different File" on page 51.)

1. While reviewing the first file you wish displayed, press **MENU** to display the menu.
2. Use **←** and **→** to select FORM, and press **RETURN** or **↓**.
3. Use **↑** and **↓** to select DUAL SCREEN, and press **RETURN**. The INPUT/EDIT screen is reduced to its upper half, and a MEMORY INDEX appears on the lower half of the display (for details about the MEMORY INDEX screen, see "MEMORY INDEX Screen" on page 87).
4. Use **←**, **→**, **↑**, and **↓** to select a text file and press **RETURN**. The text of this file is now displayed in the lower half of the screen.

XXXXXXXX	P:XX	L:XXX	COL:XXX				
0.....	L.....	2.....	3.....	4.....	5.....	6.....	H7...R...
Text of the first file							
XXXXXXXX	P:XX	L:XXX	COL:XXX	KB:X	8:32AM		
0.....	L.....	2.....	3.....	4.....	5.....	6.....	H7...R...
Text of the second file							

5. You may now edit the document in the lower half of the screen exactly in the same way as in the usual full-size INPUT/EDIT screen. The only difference is that the text area is smaller.
- You cannot view two files with the name **"*NEWFILE"** at the same time. (If you try, the machine will ask you to input a file name.)

Switching to the Other Document (When displaying two documents)



STYLE	BLOCK	CTR/RMF	SPELL	ABBR/THR	SEARCH	FORM	PAGE
						PAPER SIZE	
						HEADER	
						FOOTER	
						SCALE LINE ON/OFF	
						DUAL SCREEN	
						CHANGE SCREEN	

1. Press **MENU** to display the menu.
 2. Use **←** and **→** to select FORM, and press **RETURN** or **↓**.
 3. Use **↑** and **↓** to select CHANGE SCREEN, and press **RETURN**. The cursor immediately moves to the text displayed on the upper half if it was in the lower half, and vice-versa.
- **Short cut:** Instead of (1), (2) and (3), press **CODE** + **Q**.

Returning to Normal INPUT/EDIT Screen (When displaying two documents)

To return to the normal INPUT/EDIT screen, you must store one of the two files that are displayed on the dual screen.

1. Use the CHANGE SCREEN function described above to position the cursor on the document that you want to store in memory.
2. Press **CODE** + **FILE** and proceed to store or abandon the document (see "Saving Your Work" on page 86). The document that was not selected for storing is now displayed on a full-size INPUT/EDIT screen.

Printing a Page (PAGE)

The last option of the function menu (PAGE) allows you to print a single page of your document. It also allows you to insert page breaks that will inform the printer to eject the sheet of paper and print the next part of the document on another sheet.

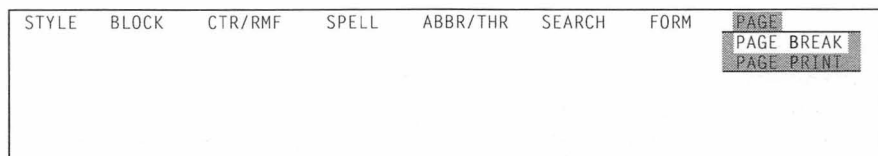
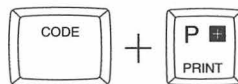
Page Breaks



The text is always automatically formatted so that a maximum number of lines can fit on one page. If you do not insert a page break by following the steps below, an automatic page break will be inserted once the maximum number of lines per page is reached. This is determined by the setting on the PAPER SIZE screen (see "Paper Size" on page 76). Each time you want to start a new page prior to the automatic page ending, proceed as follows to insert a page break symbol "↓" in your text:

1. Position the cursor where the page break symbol has to be inserted.
2. Press **MENU** to display the menu.
3. Use **←** and **→** to select PAGE, and press **RETURN** or **↓** to display the submenu.
4. Use **↓** and **↑** to select PAGE BREAK on the sub-menu, and press **RETURN**.
A page break symbol "↓" will indicate that point, and the cursor will move to the next line. The page count (P indicator) is incremented and the line count (L indicator) restarts from 1. If you change your mind, you can always erase this symbol (and eliminate the page break) with **BS**.

Page Printing



When you print a single page from the INPUT/EDIT screen, all settings like header, footer, and keyboard changes are effective. The merge symbols (see “Creating the Master Document” on page 84), however, do not cause data to be inserted, but instead are printed as blank spaces.

1. Make sure that your printer is ready.
 2. Position the cursor on the page that you want to print.
 3. Press **MENU** to display the menu.
 4. Use **←** and **→** to select PAGE, and press **RETURN** or **↓** to display the submenu.
 5. Use **↓** and **↑** to select PAGE PRINT on the sub-menu, and press **RETURN**. Printing starts.
- **Short cut:** Instead of (3), (4) and (5), press **CODE** + **P** (**PRINT**).

Data Merge

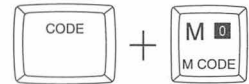
The data merge function is extremely useful when a similar letter is to be sent to numerous addresses, and each letter is to be typed with a different name and address and slightly different contents. To save you from having to recall, edit and print the same letter over and over, the merge file function was created to do the job automatically. The following steps summarize the use of this powerful function:

Creating the Merge File

To use the data merge function, you must first create a file containing the data to be inserted in the letters (the merge file). This is done using the ADDRESSBOOK mode of the MAIN MENU (see "Addressbook" on page 151). The data to be inserted into a single letter is called a record. A record is made of different labels (label 1, label 2, label 3, etc.) that correspond to the different pieces of information you need to insert in a single letter (name, address, etc.).

1. If the ADDRESSBOOK file that you want to use has been saved on diskette, load it into the memory (see "Transferring Files from Diskette to Memory" on page 278).
2. Mark (enable) the records that you want to be merged with your master document (see "Preparing the Records for Merge Printing" on page 159).
3. Exit the ADDRESSBOOK mode.

Creating the Master Document



1. Use the Word Processing mode to create a file containing the text that will be common to all letters (the master document). Wherever a piece of variable information has to be inserted in that text, press **CODE** + **M** (**M CODE**). The MRG: indicator appears on the status line. Type the label number that corresponds to the appropriate column in the ADDRESSBOOK that should be inserted. Press **RETURN**. A merge symbol "☐" appears in the text.
2. When the master document is complete, save it into the memory (see "Saving Your Work" on page 86).

Merge Printing

1. Print the master document from the MEMORY INDEX screen (see "Printing a File in Memory" on page 88). When the print menu screen appears, set the MERGE PRINT option to YES. At this point, you may also change other settings on the menu as well.

- *If you try to print the master document from the INPUT/EDIT screen, the merge symbols will be printed as blank spaces.*
2. Press **RETURN** to exit the PRINT MENU and start printing.
- *If there is no data in the Addressbook file corresponding to a merge symbol in the text file, a single space will be printed.*
 - *Printing of merge data is done according to the mode (NORMAL, BOLD, UNDERLINE, etc.) in effect when the merge symbol was entered.*

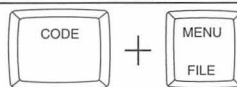
File Operation

Saving Your Work

The current file is kept in the memory even if the power is turned off accidentally during editing. If you were working on a retrieved file, the file will be automatically saved under the same file name. If you were working on a *NEWFILE, the next time you switch the machine on (and enter your password if you have set the password,) your document will automatically re-appear on the screen as you left it at the end of the previous session.

However, if the power is turned off during an operation like Search and Replace, data error may occur and you may not be able to retrieve the file. For that reason, it is not a good idea to switch the power off while editing. When your document is completed, or when you need a break, proceed as explained below.

Saving a New File



After creating a new file (the file name that appears on the upper-left corner of the screen is *NEWFILE), you have the options of saving or abandoning the file.

1. Press **CODE** + **MENU** (**FILE**) to display the following prompt on the message line:

Save file to internal memory? Press RETURN to save, CODE+D to abandon.

- *The above message does not appear if there is nothing to save. In that case, the MEMORY INDEX appears immediately.*
- 2. Press **RETURN** if you want to save the file, or **CODE** + **D** if the file is not worth saving.
- **WARNING: If you press **CODE** + **D**, the MEMORY INDEX screen appears without saving, and your work is lost.**
- *Press **CANCEL** instead of **RETURN** or **CODE** + **D** to return to the INPUT/EDIT screen without doing anything.*
- 3. If you have pressed **RETURN**, the MEMORY INDEX screen appears, and the machine asks you to input a file name:

Type filename and press RETURN.
FILENAME: XXXXXXXX.WPT

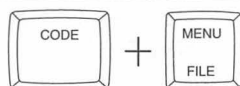
4. Type the file name (See "Entering a File Name" on page 238) and press **RETURN**. The MEMORY INDEX screen is updated and you can confirm that the new file appears in the list. The extension .WPT is automatically added to the file name.
- *Maximum of 32K can be stored into memory.*

Saving an Edited file

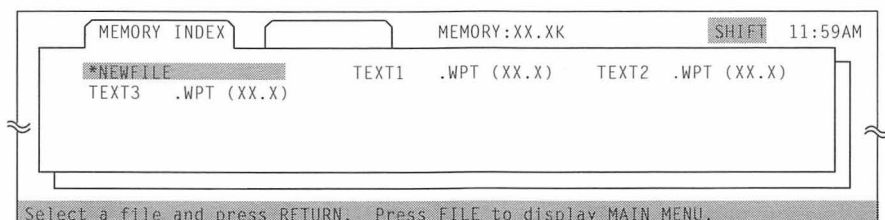


After editing an old file (the file name that appears on the upper-left corner of the screen is **not** *NEWFILE), press **CODE** + **MENU** (**FILE**). The new version immediately replaces the old one in the memory and the MEMORY INDEX screen appears.

MEMORY INDEX Screen



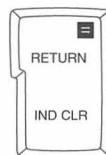
From the INPUT/EDIT screen, you must first press **CODE** + **MENU** (**FILE**) to switch to the MEMORY INDEX screen shown below and save the current file if necessary.



- This screen displays only Word Processing files (extension .WPT).
- The number displayed in parentheses at the right of the file names indicate the size of the files in kilobytes.
- The number following the indicator MEMORY indicates the memory free space in kilobytes.

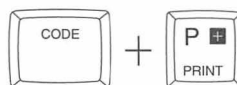
When the MEMORY INDEX screen is displayed, you can select a file to retrieve and return to the INPUT/EDIT screen for further editing. You can also use the function menu to print, copy, rename, or delete a selected file.

Retrieving Previous Work



1. While in Word Processing mode, press **CODE** + **MENU** (**FILE**). Save or abandon the current file as explained in the previous section. The MEMORY INDEX now displays the list of all the WORD PROCESSING files in memory.
 2. Use the cursor keys to select the name of the file that you want to retrieve and press **RETURN**. The beginning of the document will be displayed on the INPUT/EDIT screen.
- If you select *NEWFILE, the INPUT/EDIT screen is empty, and you may start working on a new document.
 - If the file that you want to retrieve is stored on a diskette, you must first transfer that file to the internal memory. For details, see "Loading a Word Processing File from the Diskette" on page 94.

Printing a File in Memory



1. Move the cursor to the file on the MEMORY INDEX that you want to print.
 2. Press **MENU** to display the menu.
 3. Use **←** and **→** to select PRINT, and press **RETURN**. The PRINT MENU screen shown below appears.
- **Short cut:** Instead of steps (2) and (3), press **CODE** + **P** (**PRINT**).

PRINT FILE:XXXXXXXX
SHIFT
5:01PM

<< PRINT MENU >>

STARTING PAGE	1
ENDING PAGE	999
NUMBER OF COPIES	1
HEADER PRINT	YES
FOOTER PRINT	YES
MERGE PRINT	NO
DOUBLE COLUMNS	NO
SPACE BET. COLUMNS	5
PAPER HANDLING	Manual

Type number. Set printer, press RETURN to start printing.

PRINT MENU screen

Option	Meaning
STARTING PAGE	The page number of the file on which printing is to start. The setting must be greater than zero and less than 1000. The default is 1 (starting from the first page).
ENDING PAGE	The page number of the file on which printing is to end. Must not be lower than the STARTING PAGE number. If the number is higher than the total number of pages, printing stops after the last page. The default is 999.
NUMBER OF COPIES	The number of copies you want to print. Must be greater than zero and less than 100. The default is 1 (the pages are printed once).
HEADER PRINT	Use (SPACE BAR) to toggle between YES and NO. If YES, any existing header will be printed on each page. If NO, no header will be printed, even if you have entered one.
FOOTER PRINT	Use (SPACE BAR) to toggle between YES and NO. If YES, any existing footer will be printed on each page. If NO, no footer will be printed, even if you have entered one.
MERGE PRINT	This should be left as NO when printing ordinary document files. (See "Merge Printing" on page 84.)
DOUBLE COLUMNS	This should be left as NO when printing ordinary document files. (See "Double Columns Printing" on page 90.)
SPACE BET. COLUMNS	This is used together with the above double columns printing and should be ignored when printing ordinary document files. (See "Double Columns Printing" on page 90.)
PAPER HANDLING	Use (SPACE BAR) to set to Manual or Continuous, depending of the paper feed system of your printer. Select Continuous if your printer is equipped with an automatic cut sheet feeder or if you are using continuous paper. Select Manual if you have to insert paper manually, one sheet at a time.

- *The default values for STARTING PAGE, ENDING PAGE, and NUMBER OF COPIES are displayed each time the print menu screen is called up.*
- 4. Move the cursor with **(↑)** and **(↓)** to any values you would like to change, and change using **(SPACE BAR)** for YES/NO setting, or by typing the desired value for the other options.
- 5. Set the printer and press **(RETURN)** after inserting paper.
- *Press **(CANCEL)** at any time to terminate selection and return to the MEMORY INDEX screen.*

- *If there is a wrong setting on the PRINT MENU (for example, STARTING PAGE is greater than the ending page number), the following message appears and you have to correct it to the right setting.*

Incorrect setting.

6. As soon as printing starts, the following message is displayed:

Printing. Press SPACE to pause.

Pausing/Resuming Printing



Sometimes you may wish to temporarily interrupt printing, to adjust the paper position, for example.

1. Press **(SPACE BAR)** to stop the printer. A message indicating that the printer is paused will be displayed.

Printing paused. Press SPACE to continue.

2. Press **(SPACE BAR)** to restart the printer. The above message reappears:

Printing. Press SPACE to pause.

- *Printing in progress can be terminated by pressing **CANCEL**.*
- *When printing is completed (or canceled with the **CANCEL** key), the system returns to the MEMORY INDEX screen.*

Double Columns Printing

This function allows you to print your text in newspaper fashion, with two columns across the page. A page on the screen will be printed as a column on paper. In other words, two pages will be printed on a single sheet of paper, the first page as the left column and the second page as the right column.

When formatting your document for double columns printing, you should reduce the distance between margins so that both columns and the space between columns can fit on the paper. The margins for the document should be set for one column. It is also recommended to use pitch 12 or 15 in order to fit enough text on a line.

- *Double columns printing does not work with merge printing. Merge symbols are ignored during double columns printing, and replaced with blank spaces.*

- To ensure proper column alignment, the document must not contain any margin or pitch or line spacing changes. It may, however, contain any number of keyboard and tab changes.
1. Before typing, set the left margin near 0 and the right margin at approx. 35.
 2. Type the first column. This will be the left column on your page. Insert a PAGE BREAK (see "Page Breaks" on page 82) to end your left column and start page 2.
 3. Type the second column. This will be the right column on your page. The text should follow the PAGE BREAK symbol and page 2 should be indicated.
 4. When finished, press **FILE** to save and give your document a file name.
 5. At the WP INDEX, highlight the file name to be printed in double columns and press **CODE** + **PRINT** (**P**).
 6. At the print menu screen, set DOUBLE COLUMNS selection to YES. If necessary, set the SPACE BET(ween) COLUMNS (the default is 5 blank spaces and the available range is from 1 to 50). You may also change other settings on the menu as well, except for MERGE PRINTING.
 7. Press **RETURN** to start printing.


Right Margin Setting for Double Columns Printing

XXXXXXXX	P:XX	L:XXX	COL:XXX	KB:X	9:10AM
0.....	L.....	2.....	3.....	4...R...	5.....
					6.....
					7.....

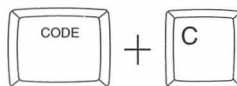
Right Margin

Double Columns Printout

Page 1 (on screen)	Page 2 (on screen)
.....
.....
.....
.....
.....
.....
.....
.....


 Space between Columns (default=5)

Copying a file in Memory



PRINT COPY DELETE RENAME LOAD SAVE

You may wish to edit a file and keep both the old and new version in memory. Make a copy of the file before editing it.

1. Move the cursor on the MEMORY INDEX screen to the file that you want to copy.
2. Press **MENU** to display the menu.
3. Use **←** and **→** to select COPY, and press **RETURN**. The following message appears:

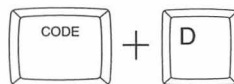
Type filename and press RETURN.
FILENAME: XXXXXXXX.WPT

- **Short cut:** Instead of (2) and (3), press **CODE** + **C**.
4. Input the new file name and press **RETURN**. The system then returns to the MEMORY INDEX screen.
- If the specified new file name already exists in the memory when you press **RETURN** in step (4), the following message appears:

Filename exists. Press RETURN to overwrite or type new name and press RETURN.
FILENAME: XXXXXXXX.WPT

- Press **RETURN** to overwrite the file with the same file name, or type a new file name and press **RETURN** to copy your data under a different file name. Press **CANCEL** to exit without copying.



Deleting a file from the Memory







PRINT COPY DELETE RENAME LOAD SAVE

Deletion of unwanted files is useful to make room in the memory for new files.

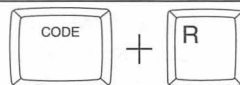
1. Move the cursor on the MEMORY INDEX screen to the file that you want to delete.
2. Press **MENU** to display the menu.

- Use  and  to select DELETE, and press . The following message appears:

Are you sure you want to delete? Press Y(yes) or N(no).





- Short cut:** Instead of (2) and (3), press  + .
- Press  to delete the file. If you press , the message disappears and the system goes back to the MEMORY INDEX screen without deleting the file.

Renaming a File in Memory







PRINT COPY DELETE **RENAME** LOAD SAVE

Renaming file is often useful when you want to improve the organization of your data.


- Move the cursor on the MEMORY INDEX screen to the file that you want to rename.
- Press  to display the menu.
- Use  and  to select RENAME, and press . The following message appears:

Type filename and press RETURN.
FILENAME: XXXXXXXX.WPT

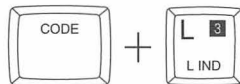
- Short cut:** Instead of (2) and (3), press  + .
- Input the new file name and press  to rename.
 - If the specified new file name already exists when you press  in step (4), the following message appears:**

Filename exists. Type new filename and press RETURN.
FILENAME: XXXXXXXX.WPT

Proceed as in step (4), using a different file name.

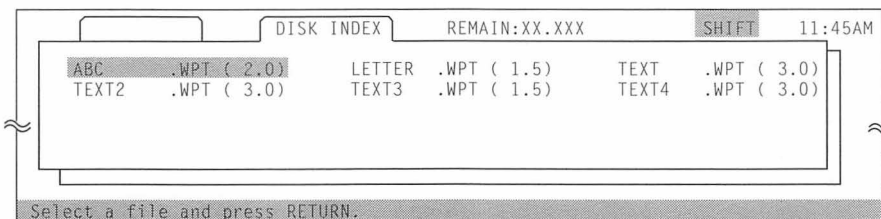
- Pressing  while a message is displayed cancels the operation and returns the system to the MEMORY INDEX screen.

Loading a Word Processing File from the Diskette



PRINT COPY DELETE RENAME **LOAD** SAVE

1. Insert the diskette containing the file you want to load.
2. While viewing the MEMORY INDEX screen, press **MENU** to display the function menu.
3. Use **←** and **→** to select **LOAD** and press **RETURN** to display the DISK INDEX screen. Only the Word Processing files (extension .WPT) will be listed on the screen.

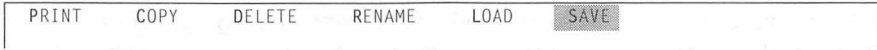
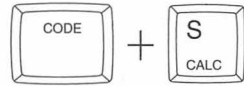


- **Short cut:** Instead of (2) and (3), press **CODE** + **L**.
4. Use the cursor keys to select a Word Processing file and press **RETURN** to load or **CANCEL** to return to the MEMORY INDEX without loading.
 - If the selected file name is already used for another Word Processing file in the memory, this message will appear:

Filename exists. Press RETURN to overwrite or type new name and press RETURN.
FILENAME: XXXXXXXX.WPT

Type a new file name and press **RETURN** to load the file under a different file name, or press **RETURN** without typing a new file name to overwrite the file in the memory. Press **CANCEL** to escape.

Transferring a File from Memory to Diskette



The SAVE function is used to copy a file from the memory to a diskette. Once the file is saved on a diskette, you may delete it from the memory in order to make room for new documents.

1. Insert a diskette in the drive.
 2. Move the cursor on the MEMORY INDEX to the file that you want to transfer to the diskette.
 3. Press **MENU** to display the menu.
 4. Use **←** and **→** to select SAVE and press **RETURN**. If the file name selected does not exist on the diskette, the file is saved immediately and the system returns to the MEMORY INDEX screen.
- **Short cut:** Instead of (3) and (4), press **CODE** + **S**.
5. If the file name already exists on the diskette, the following message appears:

```
Filename exists. Press RETURN to overwrite or type new name and press RETURN.  
FILENAME: XXXXXXXX.WPT
```

- Press **RETURN** to overwrite the file with the same filename, or type a new name and press **RETURN** to your data under a different filename.
Press **CANCEL** to exit without saving.
- **Overwriting replaces the old data with the new data.**

Business Letter Template Diskette

A Business Letter Template diskette is available. This diskette is provided to help you write business letters. The sample letters stored on this diskette are divided into different categories. Each file contains several letters of the same category. After a file is loaded into the machine's memory, you are able to select the letter which fits your purpose. You can then edit that letter by changing names, addresses, dates, etc. You can also add new text. You can then print your letter and save it.

Operation

1. Insert the Brother Business Letters diskette in the disk drive.
2. Select 1. Word Processing from the MAIN MENU.
3. When the INPUT/EDIT screen appears, press **CODE** + **MENU** (**FILE**) to switch to the MEMORY INDEX screen.
4. Press **MENU** to display the function menu and select LOAD to switch to the DISK INDEX screen. A list of the files stored on the diskette appears on the screen.
- **Short cut:** Instead of steps (4), press **CODE** + **L**.
5. Highlight the desired file and press **RETURN** to load it into the memory and return to the MEMORY INDEX screen.
6. Highlight the file again and press **RETURN** to display it on the INPUT/EDIT screen. The titles of the letters in the file are displayed on the INPUT/EDIT screen as the first page of the file.
7. Use **CODE** + **G** (**GOTO**) to jump to the desired letter.
8. Press **CODE** + **C** and highlight all the text in the letter by using the cursor keys.
9. Press **CODE** + **T** (**TEMP**) to store the text into a temporary file.
10. Press **CODE** + **MENU** (**FILE**) to return to the MEMORY INDEX.
11. Select *NEWFILE and return to display a blank INPUT/EDIT screen.
12. Press **CODE** + **T** (**TEMP**) and then **RETURN** to recall the temporary file.
13. Edit the letter. If you wish, press **CODE** + **P** (**PRINT**) to print.
14. Press **CODE** + **MENU** (**FILE**), then **RETURN**. Enter a new file name and press **RETURN** again to save your letter.

Spreadsheet

What is a Spreadsheet?

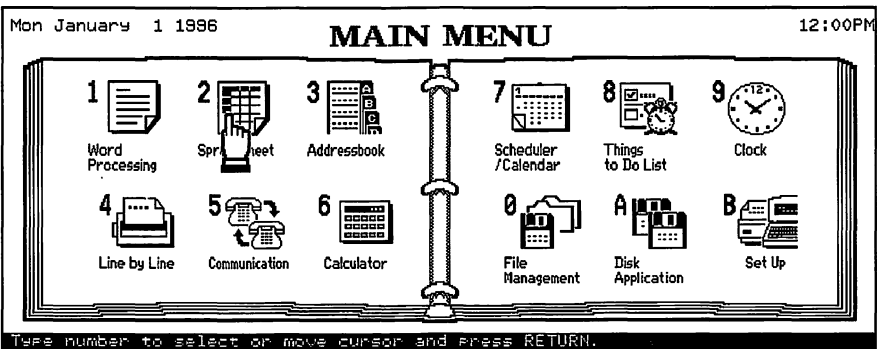
In the past, financial records for any type of business or other organization were always kept by hand in bound form, hence the term “keeping the books”. A sales ledger, for instance, might be laid out as a graph, with the months of the year across the top, and the names of sales personnel or merchandise down the left column. This type of accounting tool had another name; it was called a “Spreadsheet”.







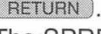
	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL

This is an efficient system, though, even with an electronic calculator, bookkeeping is still a difficult task, especially when revisions or corrections are to be made. This is the major advantage of the electronic spreadsheet; the ability to make changes and corrections at any time, and have all the calculations made for you, quickly and easily.

How to Start?

1. To start working in spreadsheet mode, switch the machine on to display the MAIN MENU.



2. Insert a diskette in the drive.
3. Type "2" or move the cursor to 2. Spreadsheet using , , , and , then press . The SPREADSHEET INDEX appears.
4. To start creating a new file from scratch, use the cursor keys to select *NEWFILE and press .
To retrieve an existing file, use the cursor keys to select the file and press .
5. The SPREADSHEET INPUT/EDIT screen appears.

A1 :		PITCH:10					
	A	B	C	D	E	F	G
1							
2							
3							
4							

Enter your spreadsheet data. Press FILE to finish.

- When you select *NEWFILE, you can start creating a new spreadsheet.
- When you select an existing file, you can start editing the spreadsheet.
- You can also work on a spreadsheet file created on a computer using Lotus[®] 1-2-3[®]. For details, see page 144.
- The maximum size for a spreadsheet file is 15K.

The Spreadsheet Templates

The Spreadsheet Templates are pre-formatted files to be used with the Spreadsheet Software. They are stored on the diskette which comes with your machine. A list of these files will be displayed on the INDEX screen of the Spreadsheet Software. These files allow for easy creation of most standard spreadsheets. Since the format is already decided, all you have to do is input your data in that format without going to the trouble of first thinking about the most convenient layout. You may retrieve one of these files, input your data in the pre-programmed format, and store the file under a new file name. The Spreadsheet Templates are write-protected, which means that they cannot be erased and that they will always be on the diskette in their original form.

How to Finish?

When you have finished, or when you need a break, insert a diskette in the drive and save your file. For details about saving files, see "Saving Your Work" on page 140.

About the Spreadsheet Files

A Spreadsheet file is stored temporarily in the memory while you are working on it. The file can be saved on diskette only.

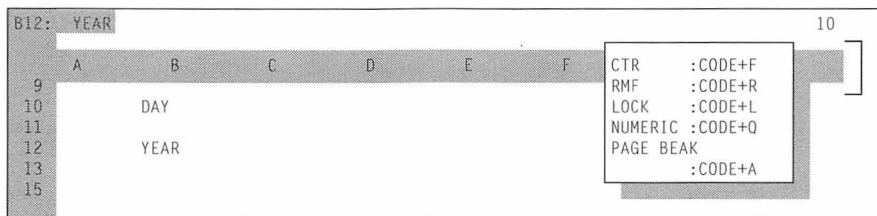
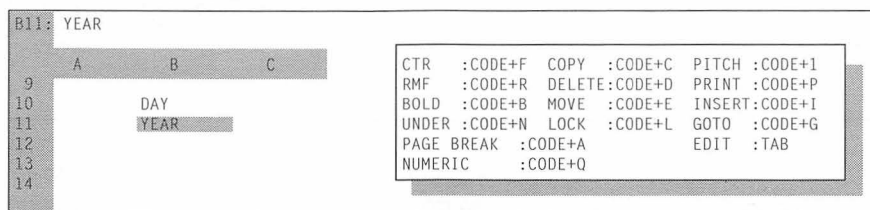
When you exit the Spreadsheet mode, the machine asks you whether you want to save or abandon the file. If you decide to save the file on diskette, the machine will ask you to enter a file name. For details about saving and retrieving files, see "Saving Your Work" on page 140, and "Retrieving a Spreadsheet File" on page 141.

Help Menus



Several functions of the spreadsheet can be activated by pressing **CODE** + a letter key. The key tops do not indicate the function of those keys. The help menus provide you with an easy way to activate the functions. A help menu displays the list of functions that are available at the moment you call it. Three different help menus can be displayed: one in the command mode of the INPUT/EDIT screen, one in the input mode of the same screen, and one on the SPREADSHEET INDEX screen.

1. To display a help menu, press **CODE** + **H** (**HELP**). The list of functions available at that moment – and the list of the corresponding keys – will appear on the screen.
 2. Press **CODE** + the indicated key to activate the desired function. The help menu will disappear and the function will be activated.
- Press **CANCEL** or press **CODE** + **H** (**HELP**) again to cancel the help menu without activating a function.



SPREADSHEET INDEX

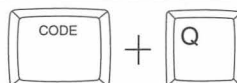
*NEWFILE

SALES .SPR (12.3)

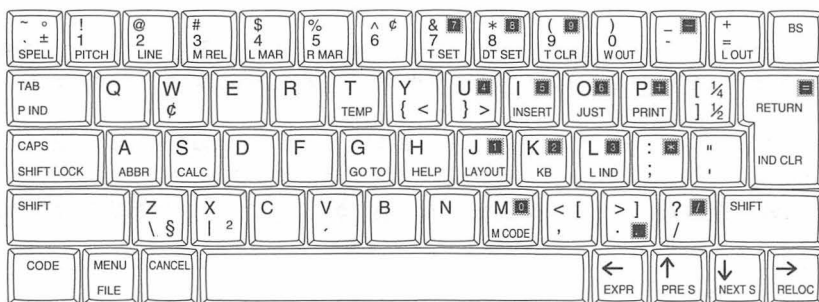
EXAMPLE .SPR

COPY :CODE+C PRINT :CODE+P
DELETE :CODE+D DISK READ :CODE+F
RENAME :CODE+R CONV TO WP FILE
:CODE+O

Numeric Keypad



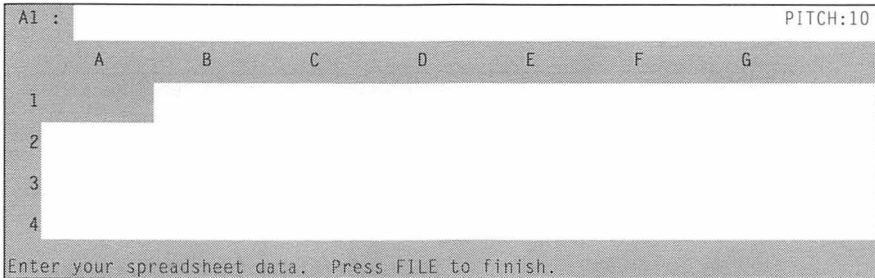
As shown on the next illustration, a portion of the keyboard can be used as the numeric keypad of a pocket calculator. To activate the numeric keypad, press **CODE** + **Q**. Press the same key again to return to normal typing. The NUM indicator appears when the keypad function is activated.



- If the keypad function is on, you will have to turn it off temporarily to type alphabetic letters. However, you **do not** need to turn the keypad function off in order to use function keys such as **CODE** + **P** (**PRINT**).

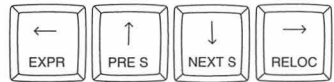
The Input/Edit Mode

The SPREADSHEET INPUT/EDIT Screen



The INPUT/EDIT screen is your electronic spreadsheet. This screen is used to input and edit the data of your spreadsheet. It is divided into cells, designated by their positions on the grid, so that the cell at the top left of the sheet becomes A1, the cell diagonally to the right and below it B2, etc.

Moving Around the Screen



When you call up the INPUT/EDIT screen, the cursor will be in cell A1, ready for input. The cursor can be moved with , , , and to highlight any cell and to tell the machine where you wish to input. You will notice that only a portion of the spreadsheet is shown on the screen. The spreadsheet extends far beyond what the screen is able to display at one time – you may input data into as much as 20 columns (A through T), and 65 rows (1 through 65).




















It is also possible to move the cursor faster: + a cursor key moves the cursor to a border of the screen.

To move the cursor to a border of the spreadsheet, press + (). This message will appear:

Use arrow keys to move to top, bottom, left or right.

Press a cursor key to move in the desired direction.

Moving the cursor

Keys	Function
	Moves the cursor to the next cell in the direction of the keypad arrow.
	
	
	
 + 	Moves the cursor to the spreadsheet edge in the direction of the keypad arrow.
 + 	
 + 	
 + 	
 +  (), then...	
 ,  ,  , or 	Moves the cursor to the spreadsheet edge in the direction of the keypad arrow.

The Input Area

With this electronic spreadsheet, you always type or edit the data of each cell on the top line of the screen, which is called the "input area".

There are basically two ways to input data: direct input, and formula input. Direct input means that you directly type what will appear in the highlighted cell. Formula input means that you type a formula in the input area. In that case, the result of the formula is displayed in the cell.

When you move the cursor across the grid to highlight (select) a particular cell, the contents of that cell are always displayed in the input area on the top line of the screen, the way you typed them. What you see in the input area, may often differ from what is displayed in the cell:

- If you typed a formula, the formula, not the result, will appear in the input area. This feature allows for easy editing when a formula is wrong.
- Even in the case of direct input, the data may look slightly different in the input area and in the cell. This is because this machine allows you to control the layout of the data in the cells. For example, you may decide that a cell will be displayed in bold. The data will appear in bold in the cell, and in normal face in the input area.

A1 :	(1+1)							PITCH:10
	A	B	C	D	E	F	G	
1	2							
2								
3								
4								

Entering and Editing Data

IMPORTANT: *There is a possibility that the machine may run out of memory before filling the entire spreadsheet with data, depending on the types of data you enter. The system will warn you of this with the message "Memory full." At this point, you may no longer enter data, but only delete it. We recommend that you save your file and continue with a new spreadsheet file. Each spreadsheet file may contain about 15K of memory.*

To enter data in an empty cell, select that cell and type the data. A small cursor, the input cursor, will appear in the input area. Press **RETURN** when you have finished. The data will appear in the cell.

Proceed exactly in the same way to replace old data with new data. The old data will disappear from the input area as soon as you start typing. The new data will appear in the cell when you press **RETURN** after retyping.

- If you mistakenly hit a character key while moving through the grid, the machine will switch to the input/edit mode. If you press **RETURN** at this step, the old data will be replaced with the character. To avoid this, press **CANCEL** instead of **RETURN**. This will restore the original data and return the machine to the command mode.






To edit old data without deleting it first, press **TAB**. The cursor appears in the input area and you may now edit the data. Press **RETURN** when the data is edited.

- After typing or editing in the input area, press **→**, **↑**, or **↓** instead of **RETURN**. These keys enter the data, return to the command mode, and move the cursor one position in the direction of the arrow mark on the grid.
- In input/edit mode, you may use **←** and **→** to move the cursor across the data in the input area. However, **→** will enter the data, as explained above, if you try to move past the last character. Use **CODE** + **←** (**EXPR**) to move to the first character, or **CODE** + **→** (**RELOC**) to move to the right of the last one.

Input/edit keys

To type and correct data	Function
Character keys	To type the data.
BS	To delete the character to the left of the cursor.
CODE + 0 (WOUT)	To delete the word to the left of the cursor.
CODE + = (LOUT)	To delete all characters from the input area.
CODE + I (INSERT)	To toggle the insert/overwrite modes.
←	To move one position to the left.
→	To move one character to the right. If the cursor is to the right of the last character, this key enters the data and selects the next cell to the right.
CODE + ← (EXPR)	Moves the cursor to the first character.
CODE + → (RELOC)	Moves the cursor to the right of the last character.

Keys used to enter data

To enter data and return to command mode	Function
	To enter the data.
	To enter the data and select the next cell to the right (only when the cursor is past the last character of the input area.)
 and 	Enters the data and selects the next cell above or below.
	Restores the old data.

Alphanumeric Data

Alphanumeric data is any combination of characters (letters, digits, and other characters) used as a label to identify the entries of the spreadsheet. It is usually as a column heading, such as "JAN." or "12th Region". This data is not to be calculated.

Format Marks





If the label data begins with an alphabetic letter, it is assumed that this data is not to be calculated. In this case, the data is placed flush left in the cell unless a flush right or centering format mark is used.

If the label begins with any of the following:

+ - (@ 1 2 3 4 5 6 7 8 9 0 .

it is assumed that this data is to be calculated. In this case, a format mark must be used in order to identify this data as a label and not as a number to be used in a calculation.

Format marks

Format Mark	Position of the Data
'	Flush left
"	Flush right ( +  – see Help Menu)
^	Centering ( +  – see Help Menu)

Format marks are displayed in the input area only. They never appear in the cell. The above characters are considered as format marks only when they are entered in the first position of the input area. If they are entered in the middle of the data, they are considered as common characters and will appear in the cell.

To enter a format mark for right justification, type a double quotation mark (") or press **CODE** + **R**.

To enter a format mark for centering, press **CODE** + **F**.

IMPORTANT: *To make sure that alphanumeric data such as a date (e.g. 10-12-1989) or a phone number (e.g. 231-638-7520) is not calculated, always use a format mark. If you enter 231-638-7520 without a format mark, you will get the result of the calculation (231-638-7520 = -7927).*

Maximum Length of Alphanumeric Data

The maximum length of alphanumeric data is 55 characters (the total length of the input area). If the data cannot fit in the cell, it will use the next cells of the grid unless these cells are already occupied. This convenient feature is used for long titles, when you do not want to disturb the layout of the spreadsheet by increasing the width of a column. It should be noted that entering many long alphanumeric data may cause the memory to become full before all cells are occupied. Also, adjusting the width of many columns to display long alphanumeric data may cause truncation of the rows in the printout.

Numeric Data

Numeric data are direct numbers or formulas and are to be calculated. When data is not recognized as alphanumeric, the machine will interpret it as numeric data. In that case, the machine will check whether or not the data is valid.

- If the data is valid, the result (a number) is calculated. If the number can fit in the cell, it is automatically right-justified. If the number cannot fit in the cell, a string of asterisks (*) will fill the cell. The correct number is however kept in the memory, and will be displayed if you adjust the width of the column.
- If the data is not valid, ERROR will be displayed in the cell, and a message such as one of the following messages will inform you as to what is going wrong.

Example 1: If a denominator is zero.

Division by zero.

Example 2: If a result is positive and contains more than 13 digits.

Numeric overflow.

Example 3: If a result is negative and contains more than 13 digits.

Numeric underflow.

Example 4: If a number contains characters other than numerics and decimal point (e.g. 1,000, 100\$, 1A2).

Invalid entry.

Direct Numbers

A direct number is digits, and possibly a decimal point. Other characters will make the data invalid. The maximum number of digits is 13 (zeroes preceding other digits are not counted). Here are some examples of valid and invalid direct numbers:

Valid	Invalid
1234	1,000 (comma is invalid)
0.94956	125\$ (\$ is invalid)
00001	12a12 (a is invalid)
000000000000001 (zeroes are discarded)	99999999999999 (more than 13 digits)

Formulas

A formula is made of operators, operands, and possibly pairs of parentheses to change the order of calculation.

Operators

The operators that are recognized by the machine are, in order of precedence:

Operators	
+ -	Positive and negative sign
#	Exponentiation
* /	Multiplication, division
+ -	Addition, subtraction

- The + and - operators are considered as the sign of the following operand when they come first in a formula, immediately after a left parenthesis or another operator.
- The # operator performs only integer exponentiation. If the exponent (the next operand after #) has a decimal value, it will be rounded to the closest integer before exponentiation is performed. Therefore, this operator cannot be used to calculate roots (although roots can always be written as a decimal exponent in math). Zero with any positive exponent gives zero. Zero with a negative exponent gives "Invalid entry."
- Division by zero is invalid.
- A sequence of three or more operators makes a formula invalid ($2+*-1$ is invalid).
- A sequence of two operators is valid only if the second operator is a + or - sign ($5*-2$ is valid and gives -10 while $1-*2$ is invalid).

Operands

An operand can be a valid number, the address of a cell containing numeric data, a function, or a valid formula included in a pair of parentheses.

Examples of valid operands:

123 (direct number)
A1 or a1 (cell address; A1 must contain numeric data)
@SUM(A1..B6) (valid function)
(A1+5*@SUM(B1..B12)) (valid formula included in a pair of parentheses)

- A cell address can be written using either small or capital letters.
- When a cell address has to come first in a formula, it must be preceded with a + or - sign, or by a left parenthesis. Otherwise, the formula will be considered alphanumeric data and will not be calculated. Therefore, instead of $A1+A2$, enter $+A1+A2$, $(A1+A2)$, or $(A1)+A2$.
- If a cell referred to contains alphanumeric data, the formula is invalid, and ERROR will be displayed. An empty cell, however, is valid and assumed to contain zero.

Using Simple Formulas

In order to familiarize yourself with the formulas, we suggest that you try the following examples.

1. Enter 1+2 in cell A1. (Position the cursor on A1, type 1+2, and press **RETURN**.)

A1 :	1+2						PITCH:10
	A	B	C	D	E	F	G
1	3						
2							

The calculation is made automatically, and the result displayed in A1. The formula as you typed it, however, will remain, and appear in the input area whenever the cursor is placed on cell A1.

As you already know, inputs such as this do not always have to be numbers. They may also be formulas that direct the system to calculate the result of an operation on numbers already input into the spreadsheet, using cell addresses rather than direct numbers. This function allows you to create a mathematical relationship between desired cells that remains unchanged, regardless of the content of those cells.

2. Enter 10 in cell A2, then enter 2 in cell B2.

B2 :		2						PITCH:10							
		A		B		C		D		E		F		G	
1		3													
2		10		2											

3. Enter +A2+B2 in cell C2 (the + sign is used here because a formula cannot begin with a letter).

C2 :	+A2+B2						PITCH:10
	A	B	C	D	E	F	G
1	3						
2	10	2	12				

4. Enter $+A2-B2$ in cell D2.

D2 :	$+A2-B2$						PITCH:10
	A	B	C	D	E	F	G
1	3						
2	10	2	12	8			

5. Enter $+A2*B2$ in cell E2.

E2 :	$+A2*B2$						PITCH:10
	A	B	C	D	E	F	G
1	3						
2	10	2	12	8	20		

6. Enter $+A2/B2$ in cell F2.

F2 :	$+A2/B2$						PITCH:10
	A	B	C	D	E	F	G
1	3						
2	10	2	12	8	20	5	

7. Enter $+A2\#B2$ in cell G2.

G2 :	$+A2\#B2$						PITCH:10
	A	B	C	D	E	F	G
1	3						
2	10	2	12	8	20	5	100

8. Now try changing the value in A2 to 20.

A2 :	20						PITCH:10
	A	B	C	D	E	F	G
1	3						
2	20	2	12	8	20	5	100

Nothing changes because you have not yet asked the machine to carry out recalculation.

9. To recalculate the results, refer to “Recalculation” on page 133. All the results which depend on the value of A2 are now updated.

A2 :	20	PITCH:10					
	A	B	C	D	E	F	G
1	3						
2	20	2	22	18	40	10	400

Order of calculation of a formula

Calculation of a formula is performed in the order of precedence of the operators: the + or - sign is first attributed to the operand directly to the sign's right, next exponentiations are carried out, then multiplication and divisions, and finally, additions and subtractions.

Example:

$2\#3\#4-2$

$8\#4-2$

$32-2$

30

When two or more operators have the same order of precedence (multiplication and divisions, or addition and subtraction), calculation is carried out from left to right.

Examples:

$1+3+4-2$

$2\#3\#2$

$4+4-2$

$8\#2$

$8-2$

64

6

To modify the order of calculation, you may use pairs of parentheses. The formula in parentheses is calculated first.

Examples:

$1+3\#4$

$(1+3)\#4$

$1+12$

$4\#4$

13

16

Parentheses can be nested. Calculation proceeds from the innermost pair of parentheses.

Example:

$((3*4+1)*4+3)*4-12$

$(13*4+3)*4-12$

$55*4-12$

$220-12$

208

- *Up to 6 pairs of parentheses can be nested. Using more than 6 pairs of nested parentheses makes the formula invalid. The formula will also be invalid if parentheses do not come by pairs.*

Maximum Length of a Formula

The maximum length of a formula is 55 characters (the total length of the input area). If a formula is longer, try to simplify it by using functions (see below). It should be noted that entering many long formulas may cause the memory to become full before all the cells are occupied.

Math Functions

Functions are made by the @ character, followed with a valid function name in capital or small letters (see list below), and a pair of parentheses containing the argument(s) of the function.

Arguments are the numeric data that the function will process to return a result. Valid arguments are numbers and/or cell addresses separated with commas, or a range defined by the addresses of two opposite corners, separated with two periods (..).

Example:

@SUM(1,A1,4,B6) returns the sum $1+A1+4+B6$

@SUM(A1..B4) returns the sum $A1+B1+A2+B2+A3+B3+A4+B4$

- *Some functions like @INT accept only one argument. In that case, using more than one argument or using a range makes the formula invalid.*
- *A range cannot be used simultaneously with numbers or addresses.*

Example:

@SUM(1,A1..B4) and @SUM(A23,A1..B6) are invalid.

- *Although a function is a valid operand of a formula, a formula is not a valid argument of a function.*

Example:

1+A1+@SUM(B2..C5) is a valid formula

@SUM(1+2), @SUM(+A1), and @SUM(1+A1) are all invalid

What is a Range of Cells?

A range is no more than a group of cells enclosed in a rectangle, and therefore, can be specified by the addresses of two opposite corners. When using math functions, you specify a range using the notation A1..C3, for example. You could also specify the same range with A3..C1, C1..A3, or C3..A1.

A1 :							PITCH:10
	A	B	C	D	E	F	G
1	Range A1..C3,				This is not		
2	A3..C1, C1..A3,				a range		
3	or C3..A1						

Easy Input of a Range

Rather than typing in the cell address at each corner of the range, you are able to mark and highlight the range to be used. The spreadsheet will automatically define the top left and bottom right corners of the range.

Suppose you want to calculate the sum of the range A1..E2 and display the result in G1.

G1 :							PITCH:10
	A	B	C	D	E	F	G
1	1	2	3	4	5		
2	6	7	8	9	10		

1. Move the cursor to G1 and type @SUM(. As soon as you type the left parenthesis of the function, the following message appears:

Enter cell specification.

2. Instead of typing A1, move the cursor to A1 and press **CODE** + **L** (see Help Menu). @SUM(A1.. is now displayed in the input area.

A1 :	@SUM(A1..						PITCH:10
	A	B	C	D	E	F	G
1	1	2	3	4	5		
2	6	7	8	9	10		

3. Move the cursor to the opposite corner of the range E2.

E2 :	@SUM(A1..						PITCH:10
	A	B	C	D	E	F	G
1	1	2	3	4	5		
2	6	7	8	9	10		

4. Press **RETURN**. The cursor is back on G1 and the result is calculated.

G1 :	@SUM(A1..E2)						PITCH:10
	A	B	C	D	E	F	G
1	1	2	3	4	5		
2	6	7	8	9	10		

5. Press **RETURN** again. The result, 55, appears cell G1.

G1 :	@SUM(A1..E2)						PITCH:10
	A	B	C	D	E	F	G
1	1	2	3	4	5		55
2	6	7	8	9	10		

List of Functions

Some functions can process only one argument, and are very similar to the math functions which are learned at school. Arguments may include not only direct number inputs, but cell addresses as well.

The most sophisticated function of the spreadsheet can process multiple arguments. Arguments may be written individually, separating each with a comma, or, if all the arguments belong to a range, the range can be specified by the addresses of two opposite corners, using two periods as a separator. Arguments may be defined as a range or may consists of any combination of direct numbers and cell addresses.

• Functions Using a Single Argument

Functions using a single argument

Name	Definition
@ABS	<p>Gives the absolute value of the argument. If the argument is positive, or zero, the same value is returned; if the argument is negative, the opposite of the argument is returned.</p> <p>@ABS(5) gives 5 @ABS(-5) gives 5</p>
@INT	<p>Gives the integer part of the argument. The decimal point and subsequent decimal digits are removed without being rounded off; an integer will remain untouched.</p> <p>@INT(5) gives 5 @INT(0.9) gives 0 @INT(1.1) gives 1</p>
@SQUARE	<p>Gives the square of the argument. The argument multiplied by itself is returned; the result is always a positive number.</p> <p>@SQUARE(5) gives 25 @SQUARE(-5) gives 25 @SQUARE(0) gives 0</p>
@SQRT	<p>Gives the square root of the argument. The result multiplied by itself is equal to the argument. The argument may not be negative.</p> <p>@SQRT(25) gives 5 @SQRT(2) gives 1.41421 @SQRT(-25) is invalid</p>
@ROUND	<p>Rounds off the argument to the number of specified decimal places. Two data entries are required between the parentheses: the argument itself, and a direct number that specifies the number of decimal places. If that number is not an integer, it is first rounded off to the closest integer.</p> <p>@ROUND(1.66666,2) gives 1.67 @ROUND(1.66666,3) gives 1.667 @ROUND(1.66666,2.1) gives 1.67 @ROUND(1.66666,2.5) gives 1.667</p>

• **Functions Using Multiple Arguments**

Functions using multiple arguments

Name	Definition						
@AVG	<p>Gives the average value of the arguments. The sum of the arguments is calculated, then that sum is divided by the total number of arguments.</p> <p>@AVG(1,2,3,4) gives $(1+2+3+4)/4 = 2.5$ @AVG(175) gives $175/1 = 175$</p>						
@COUNT	<p>Gives the number of non-blank cells. This function is an exception to the general rules in that: 1) the arguments MUST be cell addresses, and 2) the cell referred to may contain alphanumeric or numeric data.</p> <p>@COUNT(A1,A2,A3,A4) gives 3 if A1 contains 5 (numeric), A2 contains your name (alphanumeric), A3 contains ERROR (this is not a blank cell), and A4 is empty.</p>						
@IF	<p>This special function checks whether or not a specified condition is verified, and displays a value that depends on the result of that check. The general form of this function is @IF(condition, argument1,argument2), and can be read in plain English as: if the "condition" is satisfied, then display "argument1". If the condition is not satisfied, then display "argument2". The "condition" is usually an arithmetic comparison, using two values (number or cell address) and one of the following comparison operators:</p> <table><tr><td>= equal to</td><td><= less than or equal to</td></tr><tr><td>< less than</td><td>>= greater than or equal to</td></tr><tr><td>> greater than</td><td><> not equal to</td></tr></table> <p>@IF(A1>100,100,50) gives 100 if A1 is greater than 100, and 50 if A1 is equal to 100 or smaller than 100 @IF(A1>100,100,A1) gives 100 if A1=200 and 60 if A1=60 "Argument2" can be omitted. In that case, the function returns "argument1" when the condition is satisfied, and zero when the condition is not satisfied.</p> <p>@IF(A1=50,100) is equivalent to @IF(A1=50,100,0)</p> <p>If "argument1" and "argument2" are both omitted, the function returns 1 when the condition is satisfied, and zero when the condition is not satisfied.</p> <p>@IF(A1=50) is equivalent to @IF(A1=50,1,0) $100 * @IF(A1=50)$ is equivalent to @IF(A1=50,100)</p> <p>The "condition" can be a cell address. In that case, "argument1" and "argument2" must be omitted. The function returns 1 if the cell contains a numeric data, and zero if the cell contains alphanumeric data.</p> <p>@IF(A1) gives 1 if A1=50 and gives 0 if A1 contains a label.</p>	= equal to	<= less than or equal to	< less than	>= greater than or equal to	> greater than	<> not equal to
= equal to	<= less than or equal to						
< less than	>= greater than or equal to						
> greater than	<> not equal to						

Name	Definition
@MAX	<p>Gives the greatest argument (maximum). Remember that a positive argument is always greater than a negative one.</p> <p>@MAX(1,234) gives 234 @MAX(1,-99999) gives 1</p>
@MIN	<p>Gives the smallest argument (minimum). Remember that a negative argument is always smaller than a positive one.</p> <p>@MIN(1,234) gives 1 @MIN(-1,99999) gives -1</p>
@SUM	<p>Gives the sum of the arguments. This function is very useful in shortening long sums when the arguments belong to a range.</p> <p>@SUM(1,2,3,4,5) gives 15 @SUM(A1,A2,A3,B1,B2,B3) is equivalent to @SUM(A1..B3)</p>
@TSUM	<p>Gives the total sum of a range of cells, and also the sum of each row and column of the range if they contain data. This function is an exception to the general rules in that: 1) the argument MUST be a range, and 2) results are displayed not only in the selected cell (total sum), but also in the column to the right and in the row below the range. You must therefore be sure that the column to the right and the row below the range is empty. See below for an example.</p>

- Enter the numbers shown below in the range A1..C3, then enter @TSUM(A1..C3) in D4.

D4 : @TSUM(A1..C3) ■		PITCH:10					
	A	B	C	D	E	F	G
1	1	2	3				
2	4	5	6				
3	7	8	9				
4							

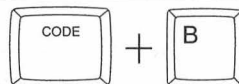
- Press **RETURN**. The results appear as follows:

D4 :	@TSUM(A1..C3)						PITCH:10
	A	B	C	D	E	F	G
1	1	2	3	6			
2	4	5	6	15			
3	7	8	9	24			
4	12	15	18	45			

The Command Mode

The command mode permits formatting and modification of an entire range of cells and is used to improve the layout of your spreadsheet.

Bold



1. Move the cursor to a corner of the range that you want to bold.
2. Press **CODE** + **B** (see Help Menu). The following menu appears:

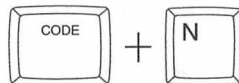
MENU: **BOLD ON** BOLD OFF

3. Use **←** and **→** to select **BOLD ON** and press **RETURN**. The following message appears:

Mark range to be bolded. Press RETURN when done.

4. Move the cursor to the opposite corner of the range and press **RETURN**. The cells of the range which already contain data appear in bold-face characters. Empty cells are unchanged, but if you input data in one of them, the data will be bolded.
- *To unbold a range of cells, proceed in the same way as above, but select BOLD OFF in step (3).*

Underline



1. Move the cursor to a corner of the range that you want to underline.
2. Press **CODE** + **N** (see Help Menu). The following menu appears:

MENU: **UNDERLINE ON** UNDERLINE OFF

3. Use **←** and **→** to select **UNDERLINE ON** and press **RETURN**. The following message appears:

Mark range to be underlined. Press RETURN when done.

4. Move the cursor to the opposite corner of the range and press **RETURN**. The cells of the range (even empty cells) are underlined.
- *To remove underlining from a range of cells, proceed in the same way as above, but select UNDERLINE OFF in step (3).*

Absolute and Relative Addresses

Whenever the layout of your spreadsheet is altered, and the data within a cell has been copied, the cell reference in the formulas are updated accordingly.

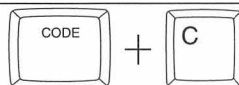
However, there may be times that you do not wish the cell address in the formula updated.

If a cell has a relative address, it is always updated to reflect any layout change.

If a cell has an absolute address, it is never updated to reflect any layout change.

All cell addresses are considered relative, unless a \$ (dollar sign) is placed at the beginning of the cell address in the formula. The dollar sign designates the cell address as being absolute.

Copying a Range of Cells



1. Position the cursor on a corner of the range that you want to copy.
2. Press **CODE** + **C** (see Help Menu). This message will appear:

Mark range to be copied. Press RETURN when done.

3. Move the cursor to the opposite corner of the range and press **RETURN**. This message will appear:

Move block cursor to destination and press RETURN.

4. Move the cursor to the upper-left corner of the destination range and press **RETURN**. The range is copied to the destination.
 - *The copy operation replaces the old data with the new data.*
 - *Relative addresses are automatically updated.*

Example:

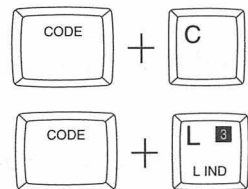
1. Enter 3 in A1, 1 in A2, 2 in A3, then enter the formulas $2 * A2 + \$A1$ in B2 and $2 * A3 + \$A1$ in B3. The addresses A2 and A3 are relative while the address \$A1 is absolute. Relative addresses are updated when copied. Absolute addresses are never updated.

B3 :	2*A3+\$A1						PITCH:10
	A	B	C	D	E	F	G
1		3					
2		1	5				
3		2	7				

- Now copy the range B2..B3 to C2. Note that the formulas of C2 and C3 are $2*B2+\$A1$ and $2*B3+\$A1$. Because $\$A1$ is an absolute address, it was not changed when copied. (See "Absolute and Relative Addresses" on page 118.)
- To recalculate the results, refer to "Recalculation" on page 133.

C2 :	2*B2+\$A1						PITCH:10
	A	B	C	D	E	F	G
1		3					
2		1	5	13			
3		2	7	17			

Copying one Cell to Many Other Cells



- Position the cursor on the cell that you want to copy.
- Press **CODE** + **C** (see Help Menu). This message will appear:

Mark range to be copied. Press RETURN when done.

- Press **RETURN** without moving the cursor. This message will appear:

Move block cursor to destination and press RETURN.

- Move the cursor to the upper-left corner of the destination range and press **CODE** + **L** (not **RETURN**).
- Move the cursor to the lower-right corner of the range and press **RETURN**. The cell is copied to the destination range.
- Relative addresses are automatically updated. (See "Copying a Range of Cells" on page 118 and "Absolute and Relative Addresses" on page 118.)

- This variation of the copy function is very useful for automatic input of formulas.

Example:

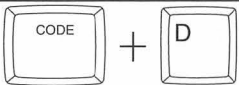
1. Enter the data shown below in A1..E1, then enter @SQUARE(A1) in A2.

A2 : @SQUARE(A1)		PITCH:10					
	A	B	C	D	E	F	G
1	1	2	3	4	5		
2	1						

2. Now copy the A2 to the range B2..E2.
- To recalculate the results, refer to "Recalculation" on page 133.

B2 : @SQUARE(B1)		PITCH:10					
	A	B	C	D	E	F	G
1	1	2	3	4	5		
2	1	4	9	16	25		

Deleting Rows and Columns



1. Press **CODE** + **D** (see Help Menu). This menu will appear:

MENU:	ROWS	COLUMNS
-------	------	---------

2. Select **ROWS** to delete rows (or **COLUMNS** to delete columns), then press **RETURN**. This message will appear:

Position block cursor. Press RETURN when done.

3. Position the cursor anywhere in the first row (or column) to be deleted. The machine asks you to specify the number of rows (or columns) to delete, for example:

Number of rows to delete :	
----------------------------	--

4. Type the number and press **RETURN**. The specified number of rows (or columns) are deleted. Existing data past the deleted rows (columns) are pulled up (to the left) and any moved formula is updated.

Example 1:

1. Enter the data shown below in the range A1..B3, then enter the formula @SUM(A1..B3) in cell C5.

C5 :	@SUM(A1..B3)						PITCH:10
	A	B	C	D	E	F	G
1		1	4				
2		2	5				
3		3	6				
4							
5			21				

2. Now delete row 2. To recalculate the results, refer to “Recalculation” on page 133.

C4 :	@SUM(A1..B2)						PITCH:10
	A	B	C	D	E	F	G
1		1	4				
2		3	6				
3							
4			14				
5							

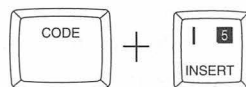
- When a function is defined in a range, like in the above example, you are not allowed to delete a row or a column that contains a corner of the range.

Example 2:

1. Using the same initial data as in the above example, delete row 1.

C4 :	@SUM(?..B2)						PITCH:10
	A	B	C	D	E	F	G
1		2	5				
2		3	6				
3							
4			ERROR				
5							

Inserting Blank Rows and Columns



1. Press **CODE** + **I** (**INSERT**). This menu will appear:

MENU: **ROWS** COLUMNS

2. Select **ROWS** to insert blank rows (or **COLUMNS** to insert blank columns), then press **RETURN**. This message will appear:

Position block cursor. Press RETURN when done.

3. Position the cursor anywhere in the first row (or column) where you want the new rows (columns) inserted. The machine asks you to specify the number of rows (or columns) to insert, for example:

Number of rows to Insert :

4. Type the number and press **RETURN**. The specified number of blank rows (or columns) are inserted. Existing data beyond the inserted rows (columns) are pushed down (to the right).

Example 1:

1. Enter the data shown below in the range A1..B2, then enter the formula @SUM(A1..B2) in cell C3.

C3 : @SUM(A1..B2)		PITCH:10					
	A	B	C	D	E	F	G
1	1	3					
2	2	4					
3			10				
4							

2. Now insert a blank row between row 1 and row 2.

C4 :	@SUM(A1..B3)						PITCH:10
	A	B	C	D	E	F	G
1		1	3				
2							
3		2	4				
4							10

Example 2:

With the same initial data as in Example 1, insert a blank row between row 2 and row 3.

C4 :	@SUM(A1..B2)						PITCH:10
	A	B	C	D	E	F	G
1		1	3				
2		2	4				
3							
4							10

Example 3:

1. Enter the data shown below in the range A2..B2, then enter the formula (A2*B2) in C2.

C2 :	(A2*B2)						PITCH:10
	A	B	C	D	E	F	G
1							
2	300	0.8	240				
3							

2. Now insert a blank column between column A and column B.

D2 :	(A2+C2)						
	A		B	C	D	E	F
1							
2	300			0.8	240		
3							

Example 4:

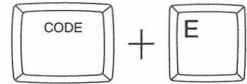
With the same initial data as in Example 3, insert a blank column between column B and column C.

D2 :	(A2+B2)						PITCH:10
	A	B	C	D	E	F	G
1							
2		300	0.8	240			
3							

- If the insertion you wish to make will exceed the limitations of the spreadsheet, the data in the rows or columns on the far edge will be lost. The system will warn you of this, and allow you to choose whether to quit the insertion or allow the data to be lost with this message:*

Insert will result in data loss. RETURN to insert or CANCEL to quit.

Moving a Range of Cells



- Position the cursor on a corner of the range that you want to move.
- Press **CODE** + **E** (see Help Menu). This message will appear:

Mark range to be moved. Press RETURN when done.

- Move the cursor to the opposite corner of the range and press **RETURN**. This message will appear:

Move block cursor to destination and press RETURN.

- Move the cursor to the upper-left corner of the destination range and press **RETURN**. The range is moved to the destination, and the range that you marked in steps (1), (2) and (3) is cleared.
- The move operation replaces the old data with the new data.*

Example:

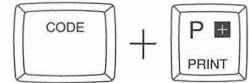
1. Enter the data shown below, then enter the formula @SUM(A1..B2) in A4.

A4 :	@SUM(A1..B2)						PITCH:10
	A	B	C	D	E	F	G
1		1	3				
2		2	4				
3							
4		10					

2. Now move the cell range A1..B2 to C1..D2.

D1 :	@SUM(A1..B2)						PITCH:10
	A	B	C	D	E	F	G
1		1	3	10			
2		2	4				
3							
4							

Printing a Range



Printing a range of cells is often a useful step when you are editing a spreadsheet. It allows you to see how your work will actually look on paper. Remember that the program also allows you to print an entire spreadsheet file from the SPREADSHEET INDEX screen.

Before you print, you may use **CODE** + **1** (**PITCH**) to adjust the pitch to 10, 12, or 15 characters per inch.

You may also split your spreadsheet manually by inserting page break symbols (**↓**) with the **CODE** + **A** key.

1. Move the cursor to a corner of the range that you want to print and press **CODE** + **P** (**PRINT**). This message will appear:

Mark range to print. Press RETURN when done.

2. Move the cursor to the cell in the opposite corner of the range and press **RETURN**. This message will appear:

Set printer and press RETURN.

3. Set the printer and press **RETURN**. If the spreadsheet is too wide, you may need to insert the sheet of paper horizontally. Printing starts.
 - *To pause during printing, press **(SPACE BAR)**. Press the same key to restart printing. To cancel printing, press **CANCEL**.*

Functions Available in the Function Menu



1. To display the function menu, press **MENU**.



2. To select a function, use **←** and **→** and press **RETURN**.

Adjusting the Width of the Columns

The default width of the columns is 10 characters. However, you may adjust the width of your column to accommodate the data that you will input (or the data that is already in the cell). While a maximum of 55 characters (the maximum length of the input area) may be put into a cell, if there is interfering data in the cells to the right, only a portion of that data may be viewed. It will still remain resident in that cell and may be viewed on the input area when the cursor is in that cell. It is not possible to change the width of an individual cell without changing the width of the entire column that cell belongs to.

1. Position the cursor anywhere within the column you wish to change and press **MENU**. The function menu appears:



2. Select **COLUMN**, and press **RETURN**. This menu will appear:



3. Select **WIDTH** and press **RETURN**. The letter of the column will appear in the input area, followed with a number indicating its current width,



and this message will appear:

Mark columns for width change. Press RETURN when done.

4. Use **←** or **→** to mark the columns that you want to change, and press **RETURN**. The marked columns are indicated in the input area (for example, A-C if you marked columns A, B and C),

New width A-C :

and this message will appear:

Enter new column width and press RETURN.

5. Type the new width in the input area (maximum 55) and press **RETURN**. The width of the marked columns is adjusted.

Filling a Range with Numbers

This function is useful when you want to number rows or columns quickly, or when you need numbers in a range in order to check how math functions are working. As an example, we are going to show you how to create a calendar (let's limit it to January 1995).

1. Enter the data shown below and adjust the width of the columns as desired.

A9 :	SAT						PITCH:10
	A	B	C	D	E	F	G
1	January						
2							
3	SUN						
4	MON						
5	TUE						
6	WED						
7	THU						
8	FRI						
9	SAT						

2. Move the cursor to B3 and press **MENU** to display the function menu.3.

MENU: COLUMN FORMAT RECALC SORT CLEAR CONV TO WP FILE

3. Select COLUMN and press **RETURN**. This menu will appear:

MENU:	WIDTH	FILL	FREEZE	RELEASE
-------	-------	------	--------	---------

4. Select FILL and press **RETURN**. This message will appear:

Mark range to be filled. Press RETURN when done.

5. Move the cursor to F9 to mark the range B3..F9 and press **RETURN**. The machine asks you to enter a starting value.
- The fill function will fill the marked range from the upper-left corner down, then starting from the top of the second column, and so on. Three values are necessary: starting, jumping, and ending values. The starting value is written in the upper-left corner. Next numbers are calculated by adding the jumping value to the previously written value. Filling stops when the calculated value exceeds the ending value or when the marked range is filled, whichever comes first.*
6. Since January First is Monday, enter 0 for the starting value. The machine will ask you to enter the jumping value and the ending value. Enter 1 for the jumping value and 31 for the ending value. The range will be automatically filled when you press **RETURN** to enter the ending value.

B3:0.00000		PITCH:10					
	A	B	C	D	E	F	G
1	January						
2							
3	SUN	0	7	14	21	28	
4	MON	1	8	15	22	29	
5	TUE	2	9	16	23	30	
6	WED	3	10	17	24	31	
7	THU	4	11	18	25		
8	FRI	5	12	19	26		
9	SAT	6	13	20	27		

7. Delete the contents of cell B3.

Freezing Columns on the Screen

Because this spreadsheet is wider than the display screen, you might find at some point that you wish to keep the first column(s) where you can see them while editing the rightmost columns.

1. Press **MENU** to display the function menu.

MENU:	COLUMN	FORMAT	RECALC	SORT	CLEAR	CONV TO WP FILE
-------	--------	--------	--------	------	-------	-----------------

2. Select COLUMN, and press **RETURN**. This menu will appear:

MENU:	WIDTH	FILL	FREEZE	RELEASE
-------	-------	------	--------	---------

3. Select FREEZE and press **RETURN**. The system asks you to indicate the columns to be frozen. This message will appear:

Move block cursor to right of columns to be frozen and press RETURN.
--

4. Freezing will always affect the first columns, from column A to the column just before the column that you choose at this step. Position the cursor and press **RETURN**. An indicator will tell you which columns are frozen, for example, if you positioned the cursor on column C:

C1 :							
	A	B	C	D	E	F	G
1	January						
2							
3	SUN		7	14	21	28	
4	MON	1	8	15	22	29	
5	TUE	2	9	16	23	30	

5. Now, if you move the cursor to the rightmost columns, you will still see the frozen columns on screen.
 - Only one group of columns can be frozen at a time. Rows cannot be frozen.
 - When you want to release the frozen columns (you must do that to be able to move the cursor into the frozen columns for editing), proceed as for freezing, but select RELEASE in step (3). A message will tell you that the frozen columns have been released:

Frozen columns have been released.

Changing the Format of Numeric Data

This system is quite capable of handling fractional numbers, though it displays the result in decimal notation. Fractional numbers may even be typed in the input area as fractions, but they will still be displayed on the grid as decimals. The system correctly stores their values.

The machine is set to display no decimal digits. You may modify this by using the format function to display up to five digits. This function also allows you to display dollar figures with a dollar symbol and two decimal places. It also can display percentage data with the percentage symbol to a specified number of decimal places, again, up to five.

To use the format function, proceed as follows:

1. Position the cursor on a corner of the range to be formatted and press **MENU**. The function menu appears:

MENU:	COLUMN	FORMAT	RECALC	SORT	CLEAR	CONV TO WP FILE
-------	--------	--------	--------	------	-------	-----------------

2. Select **FORMAT** and press **RETURN**. Specify the range and press **RETURN** again. A menu of options appears:

MENU:	FIXED	CURRENCY	PERCENT	NO DISPLAY
-------	-------	----------	---------	------------

3. Select an option and press **RETURN**. The following operations depend on the option that you selected.

• Changing the Number of Decimal Places

1. Select **FIXED** from the **FORMAT** menu to set the number of decimal places that you wish to display and press **RETURN**.

MENU:	0	1	2	3	4	5	Select number of decimal places.
-------	---	---	---	---	---	---	----------------------------------

2. Select the number of decimal places and press **RETURN**. This menu will appear:

MENU:	NO COMMAS	COMMAS
-------	-----------	--------

3. Select **COMMAS** if you want commas to separate the thousands or **NO COMMAS** if you do not. Press **RETURN**.

• Displaying Dollar Symbols

MENU:	FIXED	CURRENCY	PERCENT	NO DISPLAY
-------	-------	----------	---------	------------

1. Select CURRENCY from the FORMAT menu to display numbers with two decimal places and a dollar symbol, then press **RETURN**. This menu will appear:

MENU:	ZERO DISPLAY	NO ZERO DISPLAY
-------	--------------	-----------------

2. Select ZERO DISPLAY if you want zeroes to be displayed, or NO ZERO DISPLAY if you do not. Press **RETURN**. This menu will appear:

MENU:	NO COMMAS	COMMAS
-------	-----------	--------

3. Select COMMAS if you want commas to separate the thousands or NO COMMAS if you do not. Press **RETURN**.

• Displaying Percentages

MENU:	FIXED	CURRENCY	PERCENT	NO DISPLAY
-------	-------	----------	---------	------------

1. Select PERCENT from the FORMAT menu to display percentages (the result will be multiplied by 100 will be followed with a percentage symbol).

MENU:	0	1	2	3	4	5	Select number of decimal places.
-------	---	---	---	---	---	---	----------------------------------

2. Select the number of decimal places and press **RETURN**.

• Hiding Data

MENU:	FIXED	CURRENCY	PERCENT	NO DISPLAY
-------	-------	----------	---------	------------

1. Select NO DISPLAY from the FORMAT menu and press **RETURN**. This menu will appear:

MENU: DISPLAY NO DISPLAY

2. Select NO DISPLAY to hide data (or select DISPLAY to display data that have been hidden) and press **RETURN**.

Hidden data will still be in memory but will not be displayed on the grid. For example, you might have to split complex calculations in more simple steps. In that case, you do not need to display or print intermediate results.

Recalculation

When you input or edit numeric data, the result is automatically displayed in the selected cell. However, if other cells use this data in a formula, these are not automatically updated. In order to have all results match the new data you must recalculate.

1. Press **MENU** to display the function menu.

MENU: COLUMN FORMAT **RECALC** SORT CLEAR CONV TO WP FILE

2. Select RECALC, and press **RETURN**.

IMPORTANT: *If you are using formulas referencing cells that are themselves referencing other cells, the system cannot give the correct results with a single call of the recalculation function. In such cases, use the recalculation function again until a further use does not change any result.*

Organizing Your Data

It is important to realize that you can create files of textual information as well as numbers and formulas. The next example will illustrate this.

• Sorting a Range

When you update a file of names, addresses and phone numbers, you usually add data at the end of the file. To facilitate later reference, however, you need some logical organization. Alphabetical order is commonly used. The sorting feature shown here will save you time and effort in the organization of your data.

To prepare:

1. Enter the data shown in the illustration.

	A	B	C	D	E
1	Marsh	Henry	Miamiburg	OH	45342
2	Anderson	John	Denver	CO	82222
3	Jackson	Howard	Stanford	CA	56904
4	Bennet	William	Westfield	NJ	28854
5	Higgins	Ruth	Cambridge	MA	11000
6	Carter	David	Dallas	TX	76021
7	Bender	William	Freeport	VT	66622
8	Higgins	Joyce	Atlanta	GA	30341
9	Fox	Terry	Fremont	CA	94537
10	Lee	Kevin	Bedford	TX	76021

2. If you wish, make several copies of the data (using the copy function – **CODE** + **C**) so that you will be able to try several different types of sorts.

You are now ready to go on with the first example:

1. Position the cursor on A1 and press **MENU** to display the function menu.

MENU: COLUMN FORMAT RECALC **SORT** CLEAR CONV TO WP FILE

2. Select SORT and press **RETURN**. This menu will appear:

MENU: **SORT** SELECT SORT & SELECT

3. Select SORT and press **RETURN**. This message will appear:

Mark range to be sorted. Press RETURN when done.

We are going to rearrange the data in alphabetical order according to the last names (column A). It is important that you mark all the columns so that all data will move together with the names.

4. Move the cursor to E10 to mark the range A1..E10, and press **RETURN**. The system will ask you to enter the name of the column that the list will be sorted by (primary key)

Primary key :

and this message will appear:

Enter column of primary sort key and press RETURN.

This system allows for double sorting – primary and secondary. You wish the data to be sorted according to the last names (column A). This is the “primary key”. The primary key must always be in the marked range.

5. Type A and press **RETURN**. The system will ask you to enter the name of the column that will be used for secondary or internal sorting.

Secondary key :

This message will appear:

Enter column of secondary sort key and press RETURN.

If two or more persons have the same last name, you will require secondary sorting to maintain proper organization. Use the first name (column B) for secondary sorting.

- When you do not wish a secondary sort to take place, press **RETURN** without entering anything.
6. Type B and press **RETURN**. This menu will appear:

MENU: **ASCENDING** DESCENDING

If you select **ASCENDING**, the data will be arranged in natural alphabetical order. **DESCENDING** will place it in the reverse order.

7. Select **ASCENDING** and press **RETURN**. The last menu will appear.

MENU: **ALPHABETIC** NUMERIC

8. Since the data is alphanumeric, select **ALPHABETIC** and press **RETURN**. Your data will be alphabetically arranged.

	A	B	C	D	E
1	Anderson	John	Denver	CO	82222
2	Bender	William	Freeport	VT	66622
3	Bennet	William	Westfield	NJ	28854
4	Carter	David	Dallas	TX	76021
5	Fox	Terry	Fremont	CA	94537
6	Higgins	Joyce	Atlanta	GA	30341
7	Higgins	Ruth	Cambridge	MA	11000
8	Jackson	Howard	Stanford	CA	56904
9	Lee	Kevin	Bedford	TX	76021
10	Marsh	Henry	Miamiburg	OH	45342

You may, of course, use both alphabetic and numeric, ascending and descending sorts to organize the data. You may also use different primary and secondary keys (such as by city and first name) to put your data in the order most convenient to your purpose.

- **Selecting Data From a Range**

The SELECT option in the SORT menu allows you to print rows of data that match a specified condition. However, you may only select numeric data. In the example used previously, the only numeric data was the zip code, so we will use this data here.

1. Position the cursor on a corner of the range you want to select from, then press **MENU**. The function menu appears:

MENU:	COLUMN	FORMAT	RECALC	SORT	CLEAR	CONV TO WP FILE
-------	--------	--------	--------	-------------	-------	-----------------

2. Select SORT and press **RETURN**. This menu will appear:

MENU:	SORT	SELECT	SORT & SELECT
-------	------	---------------	---------------

3. Choose SELECT and press **RETURN**. This message will appear:

Mark range to select from. Press RETURN when done.
--

4. Move the cursor to the opposite corner of the range and press **RETURN**. The system will ask you to enter the name of the column to be used

Select Column A-E :

and this message will appear:

Enter the select column and press RETURN.

5. Type a letter (E in our example) and press **RETURN**. A menu of matching conditions will appear:

MENU:	EQUAL	NOT EQUAL	LESS	GREATER	BETWEEN	NOT BETWEEN
-------	--------------	-----------	------	---------	---------	-------------

If you select EQUAL, NOT EQUAL, LESS, or GREATER, the system will ask you to enter a numeric value (equal or not equal to what, etc.). If you select BETWEEN or NOT BETWEEN, you are requested to enter the limit values of the bracket.

6. Select EQUAL and press **RETURN**. The system will ask you to enter the value.

Equal to :

We want the list of people whose zip code is 76021.

7. Type 76021 and press **RETURN**. You are now requested to set the printer.

Set printer and press RETURN.

8. Set the printer and press **RETURN**. The printout will look as follows:

Carter	David	Dallas	TX 76021
Lee	Kevin	Bedford	TX 76021

• Sorting & Selecting Data from a Range

MENU: COLUMN FORMAT RECALC **SORT** CLEAR CONV TO WP FILE

MENU: SORT SELECT **SORT & SELECT**

This third option (SORT & SELECT) allows you to sort and select in one operation. This is useful when you want the printout to be sorted. To try out this option, you may use a copy of the data in the previous example.

After you select SORT & SELECT, the machine first sorts the data and then selects according to the specified criteria. Follow the instructions for the option SORT, then the instructions for the option SELECT.

Clearing a Range

The CLEAR option of the function menu allows you to quickly clear a range.

1. Position the cursor on a corner of the range to be cleared and press **MENU**.



2. Select CLEAR and press **RETURN**. This message will appear:

Mark range to be cleared. Press RETURN when done.

3. Move the cursor to the opposite corner of the range and press **RETURN**. The range is cleared.
 - *Attributes (bold, underline) and format (currency, percentage, etc.) are all cleared.*

Converting a Range into a Document

You may sometimes wish to include data from the spreadsheet into a document. To do this, first type the spreadsheet data and convert it into a Word Processing file as explained below. You will then be able to retrieve that file in Word Processing mode and add text.

1. Position the cursor on a corner of the range that you wish to convert and press **MENU**. The function menu appears:



2. Select CONV TO WP FILE and press **RETURN**. This message will appear:

Mark range to convert to document file. Press RETURN when done.

3. Move the cursor to the opposite corner of the range and press **RETURN**. This message will appear:

Insert destination disk and press RETURN.

4. Insert a diskette, then press **RETURN**. A list of the Word Processing files stored on the diskette will appear. The machine asks you to input a file name for the converted file.

Type new filename and press RETURN.

FILENAME: XXXXXXXX.WPT

5. Type a file name and press **RETURN**. This message will appear while the file is converted:

Converting the file....please wait.

and will be replaced with this message when the process is completed:

Converting completed.

You are now in command mode of the INPUT/EDIT screen, and the message will disappear as soon as you hit a key.

- *If all columns cannot fit between the margins, this message will appear:*

Line(s) truncated.

File Operation

This section explains how to save, retrieve, print and convert your spreadsheets. From the INPUT/EDIT screen, you must first press **CODE** + **MENU** (**FILE**) to switch to the SPREADSHEET INDEX screen and save the current file if necessary.

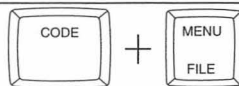
When the SPREADSHEET INDEX screen is displayed, you may select a file to retrieve and return to the INPUT/EDIT screen for further editing.

You may also select a file and use the function menu to print or convert it.

Other options available on the function menu (COPY, DELETE, RENAME) are also available in the File Management mode and will not be explained here. For details about these options, see "File Management" on page 267. There are only two minor differences between the use of these functions on the SPREADSHEET INDEX screen and in the File Management mode:

- The DELETE function available on the SPREADSHEET INDEX allows you to delete only one spreadsheet file at a time. In the File Management mode, the DELETE function allows you to delete many files of different types in one operation.

Saving Your Work



All spreadsheet files that are saved are automatically stored to diskette. All file operations described in this section will refer to the diskette. The diskette used to save spreadsheet files can be a diskette that you also use to save Word Processing files. Remember to initialize a new diskette before attempting to save data on it (see "Initializing New Diskettes" on page 12).

1. When your spreadsheet is completed, press **CODE** + **MENU** (**FILE**). The following message appears:

Insert data disk. Press RETURN to save, press CODE+D to abandon.

2. If you have nothing worth saving, press **CODE** + **D**. The SPREADSHEET INDEX appears.

If you want to save your file, press **RETURN** to display the SPREADSHEET INDEX screen. You are prompted to enter a file name:

Type filename and press RETURN.

FILENAME: █ .SPR

3. Type a file name (see "Entering a File Name" on page 238) and press **RETURN**. The file is saved on the diskette and the SPREADSHEET INDEX screen list is updated. The extension .SPR is automatically added to the file name.

If you press **RETURN** without changing the file name, or after entering a file name that is already used, this message will appear:

Filename exists. Press RETURN to overwrite or type new name and press RETURN.

FILENAME: XXXXXX \blacksquare .SPR

Type a new file name and press **RETURN** to save the file under a different file name, or press **RETURN** to overwrite the old file. Press **CANCEL** to return to the INPUT/EDIT without saving.

- If there is not sufficient space remaining on the diskette to contain the file you wish to save, the system will inform you and prompt you to insert a new diskette with this message:

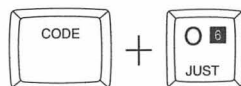
Disk is full, please try again with new disk. Press RETURN.

Insert another diskette and press **RETURN**.

Retrieving a Spreadsheet File

1. At the blank spreadsheet INPUT/EDIT screen, insert the diskette containing the file you want to retrieve and press **CODE** + **MENU** (**FILE**) to access the SPREADSHEET INDEX screen.
 2. Select the file using **←**, **→**, **↑**, and **↓**. (Select *NEWFILE to start creating a new file from scratch.)
 3. Press **RETURN** to switch to the INPUT/EDIT screen where the file can be edited.
- If you select *NEWFILE, the INPUT/EDIT screen is empty, and you may start working on a new spreadsheet.

Converting a Spreadsheet File to a Document File



The system allows you to change a spreadsheet file into a text file. You should create the spreadsheet file first. After the spreadsheet file is saved, convert it into a text file as explained below. You can then add or modify any text in the file by recalling it in the Word Processing mode.

To convert a spreadsheet file:

1. Insert the diskette containing the file you want to convert. Press **CODE** + **FILE** to view the SPREADSHEET INDEX, then select the file using **←**, **→**, **↑**, and **↓**.
2. Press **MENU** to display the function menu.

MENU:	COPY	DELETE	RENAME	CONV TO WP FILE	PRINT
-------	------	--------	--------	-----------------	-------

3. Select CONV TO WP FILE and press **RETURN**. This message will appear:

Insert destination disk and press RETURN.

- **Short cut:** Instead of (2) and (3), press **CODE** + **O** (see help menu).
4. To store the converted file on the current diskette, press **RETURN**. To store the converted file to a different diskette, insert the new diskette and press **RETURN**. The machine asks you to input a file name:

Type new filename and press RETURN.

FILENAME: XXXXXXXX.WPT

5. Type a file name and press **RETURN**. While the file is being converted, the following message is displayed

Converting the file...please wait.

and will be replaced with this message when the operation is completed.

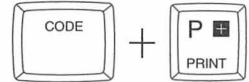
Converting completed.

- If all columns cannot fit between the margins, this message will appear:

Line(s) truncated.

Once the file is converted, you may recall the file from the Word Processing mode.

Printing a File



1. Insert the diskette containing the file you want to print. Press **CODE** + **MENU** (**FILE**) to view the SPREADSHEET INDEX, then select the file using **←**, **→**, **↑**, and **↓**.
2. Press **MENU** to display the function menu.

MENU: COPY DELETE RENAME CONV TO WP FILE PRINT

3. Select PRINT and press **RETURN**. This message will appear:

Set printer and press RETURN.

- **Short cut:** Instead of (2) and (3), press **CODE** + **P** (**PRINT**) (see help menu).
- 4. Insert paper into the printer and press **RETURN**.
- 5. During printing, press **(SPACE BAR)** to pause and resume printing. Press **CANCEL** to quit.
- If the data exceeds the printing capabilities, the data will be truncated (cut off). It is not possible to change the pitch on the SPREADSHEET INDEX screen. If the spreadsheet is too wide, try inserting paper horizontally. If it is still too wide, go back to the INPUT/EDIT screen and select a higher pitch or print only a range of the spreadsheet.
- Remember that the system allows you to input page break symbols
- (**↵**) to signal the printer to stop printing for a paper change.

Using Lotus[®] 1-2-3[®] Files

Lotus[®] 1-2-3[®] files can be converted into Brother Spreadsheet files and used on your machine. In addition, you can create spreadsheet files on your Brother unit and then convert them into Lotus[®] 1-2-3[®] files.

IMPORTANT: When converting Lotus[®] 1-2-3[®] files into Brother Spreadsheet files, be sure to store the files on the root directory of the diskette. Your Brother machine can only read the root directory of a DOS disk.

Also be sure not to use 2HD diskettes that have been formatted on a PC in the 1,200 kilobytes formats. When such a diskette is inserted into your Brother machine, the machine does not recognize the format and asks you whether you want to initialize the diskette. If you accidentally type "Y" at that step, the data on the diskette would be destroyed.

Your machine comes with a conversion program that can be used on a personal computer when converting files.

1. Insert the diskette containing the conversion program into the disk drive of the personal computer.
2. If necessary, type "A:" (or the appropriate drive) and press the ENTER key to display the A:> prompt. If the diskette is inserted in the "B" drive, type "B:" and Enter to view the B:> prompt.
3. Type the conversion program name, "SCONV" and press the ENTER key. The conversion program starts and displays this message:

Insert data disk and press ENTER.

4. Remove the conversion program diskette, insert a data diskette in the drive, and press the ENTER key. The machine asks you to select a conversion direction.

A: BROTHER SPREADSHEET (.SPR)--> LOTUS 1-2-3 (.WK1)
B: LOTUS 1-2-3 (.WK1)--> BROTHER SPREADSHEET (.SPR)

5. Type "A" or "B" and press the ENTER key. "A" will convert a Brother Spreadsheet file into a Lotus[®] 1-2-3[®] file. "B" will convert a Lotus[®] 1-2-3[®] file into a Brother Spreadsheet file.

The machine asks you to enter the name of the file to be converted:

Type source filename and press ENTER.

6. Type the file name (without extension) and press the ENTER key.
After you press the ENTER key, the machine asks you to enter a name for the converted file:

Type new filename and press ENTER.

7. Type a file name (without extension) and press ENTER. After you press the ENTER key, this prompt appears:

Converting the file.... please wait.

After the conversion is complete, this message appears:

Convert completed.

8. The machine asks you whether you want to convert other files:

Continue to convert? [Y/N]

9. Type "N" to exit the program, or "Y" to return to step (3) and start converting another file.

Sometimes, the machine will be unable to convert a cell of the source file. When this happens, the entire file is converted, but the cells that cause problem are slightly different from the original. A message will indicate the number of cells and the cause of such errors, following the message "Convert completed".

```
Convert completed.
Syntax or format error   XXX cells
Formula error           XXX cells
Function error Data loss XXX cells
Please check the data before using.
```

Syntax or format error: This may occur when a cell in a Lotus® file contains more than 55 characters. In this case, only the 55 first characters of the cell will appear in the converted file. This may also happen when a spreadsheet file from this machine contains a page break symbol. The page break symbol will be converted into a blank space.

Formula error: This error occurs, for example, when the result of a formula in a Lotus® file is beyond the range of this machine.

Function error data loss: This may occur, for instance, when a function available with Lotus® is not recognized or has a slightly different format (e.g. @SUM(A2..A5,B1..B3) or @COS(45*@PI/180)). This also happens when the length of a formula in a Lotus® file exceeds 55 characters. Please check the Lotus® file and make sure that only functions and formats available on your machine are used.

Remember that the above error messages do not mean that the file cannot be converted. They only mean that some cells cannot be converted properly.

When a file **cannot** be converted, one of these messages will appear while the message "Converting the file.... please wait." is displayed.

Data area full. Unable to convert.

This message appears if you are converting a Lotus® file that is too large.

Cell extend beyond range. Unable to convert.

This message appears when a cell in a Lotus® file is out of the range of 65 rows or 20 columns.

Check disk. Unable to convert.

This message appears when the source file is not readable.

Password is already set. Unable to convert.

This message appears when a password has been set for the Lotus® file.

Too many errors. Convert failed.

If more than 130 cells are lost, conversion is canceled.

The Templates

The Spreadsheet Templates are pre-formatted files to be used with the Spreadsheet mode. These files allow for easy creation of most standard spreadsheets. They are stored on the Template diskette that comes with your machine. The Templates are write-protected, which means that they cannot be erased and that they will always be available on the Template diskette in their original form.

For all templates, enter the data in the blank cells only. Never enter data into the cells that contain a formula.

Listed below are the templates that we have already designed for your use. These files come with an easy-to-use format. All you need to do is enter your data. The cells which are supposed to display a result already contain the appropriate formulas and format. Never enter data in the cells that already contain a formula. After you have completed your work on the template spreadsheet, you may give your template a file name and save it to a diskette. Each time you recall a template from the Template diskette, a new blank file appears. In order to recall a template that you previously worked with, recall it from the diskette by the file name you assigned.

Description of the Templates

INTRO - This template is actually an overview file that contains a reading introduction to the Spreadsheet. This template discusses some of the features and capabilities of the Spreadsheet Program.

TELEPHONE AND ADDRESS DIRECTORY - This template allows you to keep an organized listing of names and addresses. With the sort capability, you are able to rearrange this file alphabetically after each addition or edit.

CHECKBOOK - This Checkbook template resembles the ledgers that you receive from your bank. It calculates the balance after you input your deposits and withdrawals. After entering your deposits and withdrawals, select RECALC from the function menu to process the balance column. If you later make changes or additions to the data you entered in the checkbook, use the RECALC function to determine the new balance.

MONTHLY BUDGETING - This template helps you keep your personal finances in order. It outlines your monthly expenses for you. Once your expenses are itemized, use the RECALC function to determine your budget results. Later, if you make changes or additions to the budget, use the RECALC function to determine the new totals.

SALES ANALYSIS - This template helps monitor actual versus projected sales results by sales persons. Enter the data for all the cells with the exception of the cells containing formulas (zeros). After you have entered the information for each sales person, use the RECALC function to determine the results. Later, if you make changes or additions to the template, use the RECALC function to see the new results.

ANNUAL YIELD (COMPOUND) - This template figures annual yield according to the annual interest rate. Type in the annual interest rate. Use the RECALC function to see the results.

SAVING PLANNER - This template calculates your savings over a specified period of time. Enter the requested data. Use the RECALC function to determine the results.

MONTHLY PAYMENT OF LOAN - This template calculates your monthly payments and lists the amount of interest and principal paid per month, for one year. Enter the requested data. Use the RECALC function to see the results for one year.

Retrieving a Template

1. Select 2. SPREADSHEET from the main menu.
2. Insert the Template diskette and press **CODE** + **MENU** (**FILE**) to display the SPREADSHEET INDEX. The list of the Templates appears.
3. Select the desired template with the cursor and press **RETURN**. The spreadsheet appears on the screen. As you can see, the format has been set up for you already. Move your cursor around the screen. You can see that some columns have formulas already set up for calculations.

A Practice Exercise

For practice, recall the template SALES and follow these steps to enter data.

1. Move your cursor to the right of **COMPANY** and type DONNLIN SALES COMPANY. Press **RETURN**.
2. Move the cursor down to the right of **DIVISION** and type WESTERN. Press **RETURN**.
3. Move the cursor down to the right of **DATE** and type '5/31/96 (do not forget the format mark). Press **RETURN**.
 - *Each time an alphanumeric data looks like a number or a formula, type a single quote mark at the beginning to tell the machine that this data is not to be calculated. The single quote is called a "format mark". Other format marks are available. For details, see "Format Marks" on page 104.*
4. Move the cursor down under **SALESPERSON NAME** and type James Elliott. Press **RETURN**.

5. Move the cursor under **PROJECTED UNITS** and type 17000. Press **RETURN**.
6. Move the cursor under **PROJECTED SALES** and type 75000. Press **RETURN**.
7. Enter amounts for **ACTUAL UNITS** and **ACTUAL SALES**.
 - *The remaining cells to the right display "0" or "0.00%", this indicates that a formula has been entered in these cells. Do not enter data in these cells. If data is entered, the formulas will be deleted.*
8. Continue to enter data for each row, remembering not to enter data in the cells with formulas already set up.

Practice Recalculation

Formulas are used to automatically display a result that depends of the contents of other cells.

1. Press **MENU** to display the function menu.
2. Use **←** and **→** to select **RECALC** and press **RETURN**. This automatically updates all formulas.

Practice Printing

This systems provides two methods for printing spreadsheets: from the **INPUT/EDIT** screen or from the **SPREADSHEET INDEX** screen.

• From the **INPUT/EDIT** Screen

While you are editing your spreadsheet in the **INPUT/EDIT** screen, press **CODE** + **P** (**PRINT**). The machine will ask you to mark the range that you want to print. This feature is very convenient when you have a very wide spreadsheet, and need to print only a part of it. Another advantage of this method is that, on the **INPUT/EDIT** screen, you are free to select the pitch. For details about this method, see "Printing a Range" on page 125.

• From the **DISK INDEX** Screen

After saving your spreadsheet file, you can print the entire file from the **DISK INDEX** screen by pressing the same **CODE** + **P** (**PRINT**) keys. For details about this method, see "Printing a File" on page 143.

Practice Saving the File

For complete instructions regarding file saving, please refer to "Saving Your Work" on page 140.

1. Press **CODE** + **MENU** (**FILE**). This message will appear:

Insert data disk. Press RETURN to save. Press CODE+D to abandon.

2. Insert a diskette and press **RETURN**. This message will appear:

Type filename and press RETURN.

FILENAME: XXXXXXX \blacksquare .SPR

3. Give your file a name, then press **RETURN** to save it to the diskette and display the Spreadsheet Index.
- *If this is the first time you are using the diskette, you will need to initialize (format) the diskette before saving.*

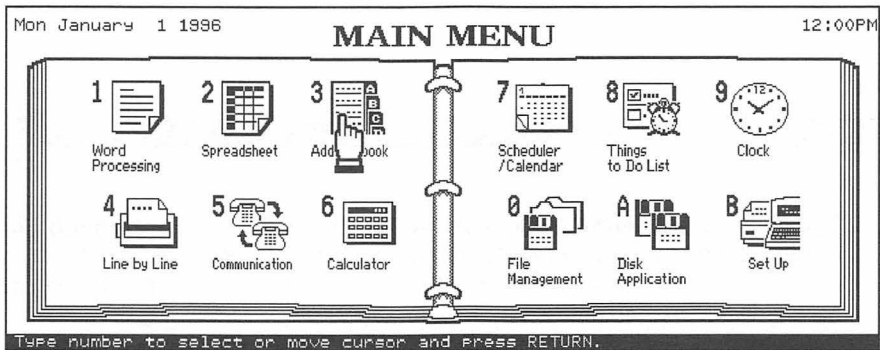
Addressbook

The Addressbook Mode

The Addressbook mode is used to input and organize data such as a list of names, addresses, telephone and fax numbers. Each entry is called a record and will be displayed as a single row divided into several items. On the top of the list, labels identify each item. The list can be edited, sorted, and printed. Parts of the list can be selected according to specific conditions, and saved as a different file. Each Addressbook file can contain up to 12K of data. You can add and delete labels within your Addressbook to customize it for your application. The maximum number of records that can be stored in one Addressbook file is approx. 250. The maximum number of characters that can be stored into a single record is 244. The default file which we have customized for standard application allows for approx. 50 names and addresses per Addressbook file.

How to Start?

1. Switch the machine on to display the MAIN MENU.



2. Type "3" or move the cursor to 3. Addressbook using the cursor keys and press **RETURN**. If the Addressbook file is empty, the DATA INPUT screen appears. If the file contains some data, the ADDRESSBOOK screen appears.

The DATA INPUT Screen

ADDRESS KB:X MEMORY:XX.XK INS SHIFT 1:27PM

RECORD:XXX

MR/MS	
LAST NAME	
FIRST NAME	
TELEPHONE	
FAX NO.	
TITLE	
COMPANY	
ADDRESS	
CITY	
STATE	
ZIP	

Type data. Press CODE+RETURN to display view screen, or FILE to finish.

The ADDRESSBOOK Screen

ADDRESS KB:X MEMORY:XX.XK SHIFT 2:40PM

:1.	:2.	:3.	:4.	:5.	:6.
MR/MS	LAST NAME	FIRST NAME	TELEPHONE	FAX NO.	TITLE
*:Mr	:Anderson	:John	:231-638-7520	:	:
*:Mr	:Bennet	:William	:123-432-7530	:	:
*:Mr	:Higgins	:Joyce	:429-342-6754	:	:

You may retype label name and press RETURN. Press FILE to finish.

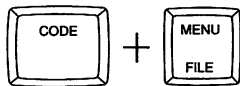
- The file name displayed in the upper-left corner of the screen will always be ADDRESS when you are working with a new file. If you save the file on diskette or load a file from diskette, the file name that you gave to the file will be displayed instead of ADDRESS.

Creating and Editing an Addressbook File

The DATA INPUT screen allows you to add a new record, or to edit the contents of an old one. This screen appears first when you start with an empty file. After typing or editing the items of a record, press **CODE** + **RETURN** (**INDEX**) to switch to the ADDRESSBOOK screen.

The ADDRESSBOOK screen does not allow for direct input of new data. You may however edit the data in several ways. You can edit the labels, change the width of the columns, perform block operations, insert blank records, sort the file and select records.

How to Finish?



From the ADDRESSBOOK or the DATA INPUT screen, press **CODE** + **MENU** (**FILE**) to return to the MAIN MENU. Since you can have only one Addressbook file in the memory, the machine will save the file immediately, without asking for a file name.

About the Addressbook Files

You can have only one Addressbook file in the memory. The file is automatically updated in the memory as you edit it.

If you need to work on a different Addressbook file, save the current file to a diskette. For details, see “Saving the Addressbook File on Diskette” on page 175. The machine will ask you to enter a file name under which the file will be saved on the diskette. After saving the current file, you can clear all the data and start creating a new file.

When you retrieve an Addressbook file from a diskette, the current file is automatically deleted and replaced with the file that you load. For details, see “Loading a File from a Diskette” on page 174.

The DATA INPUT Screen

ADDRESS KB:X MEMORY:XX.XK INS SHIFT 1:27PM

RECORD:XXX

MR/MS
LAST NAME
FIRST NAME
TELEPHONE
FAX NO.
TITLE
COMPANY
ADDRESS
CITY
STATE
ZIP

Type data. Press CODE+RETURN to display view screen, or FILE to finish.

Switching from ADDRESSBOOK to DATA INPUT Screen

The DATA INPUT screen is used to input or edit the contents of a single record. This screen appears first when you start the Addressbook mode and the Data Address file is empty. You can enter the data of the first record immediately.

To Edit a Record

When the ADDRESSBOOK screen is displayed, you can select a record in order to edit its contents:

1. Use **↑** and **↓** to move the cursor to the record that you want to edit.
2. Press **RETURN**. The contents of the selected record is displayed on the DATA INPUT screen and you can start editing.

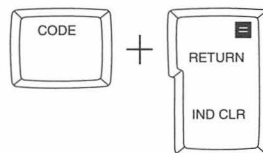
Entering and Editing a Record

1. Type or edit the data in each entry field. You may leave some items empty.
 - To correct, use **BS**, **CODE** + **0** (**WOUT**) and **CODE** + **≡** (**LOUT**)
 - To move the cursor within a field, use **←**, **→**, **CODE** + **←** (**EXPR**), and **CODE** + **→** (**RELOC**).
 - Use **CODE** + **I** (**INSERT**) to switch the insert mode on/off.

- Use **CODE** + **BS** or the dead keys to superimpose characters (see “Superimposed Characters (Permanent Backspace)” on page 22) or to enter accented letter (see “Accents (“Dead” Keys)” on page 23). If necessary, use **CODE** + **K** (**KB**) to switch the keyboard (see “Switching the Keyboard” on page 21).
- 2. To move the cursor vertically from one item to another, use **↑**, **↓**. Use **RETURN** to move to the beginning of the next item.
- 3. If an entry field is too narrow or too wide, press **CODE** + **9** (**TCLR**) (to increase) or **CODE** + **7** (**TSET**) (to decrease) to modify the width of the field by steps of eight characters.
- 4. To go back to view the ADDRESSBOOK screen, press **CANCEL** or **CODE** + **RETURN** (**IND CLR**). The new or edited record is included in the list.
- If you want to edit other records, you do not need to return to the ADDRESSBOOK screen. Press **CODE** + **↓** (**NEXT S**) to display the next record, or **CODE** + **↑** (**PRES**) to display the previous one.
- Press **CODE** + **G** (**GOTO**) and then **↑** to move the cursor to the top record, or **CODE** + **G** (**GOTO**) and then **↓** to move the cursor to the bottom record.
- Press **CODE** + **MENU** (**FILE**) to return to the MAIN MENU.

Using the Function Menu

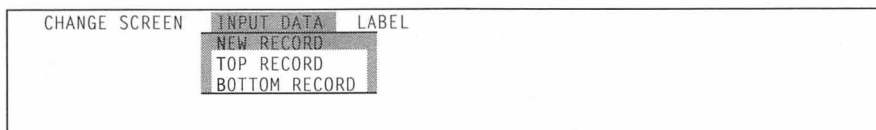
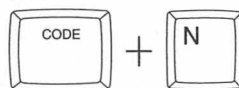
Switching to the ADDRESSBOOK Screen



CHANGE SCREEN	INPUT DATA	LABEL

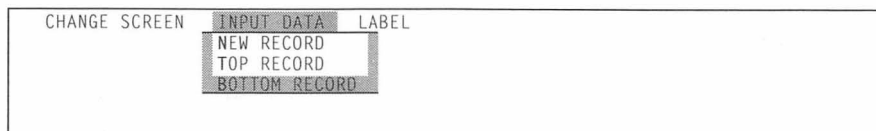
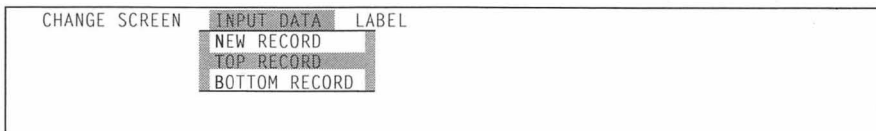
1. While viewing the DATA INPUT screen, press **MENU** to display the function menu.
 2. Use **←** and **→** to select CHANGE SCREEN and press **RETURN** to display the ADDRESSBOOK screen. The record cursor will be on the record previously displayed on the DATA INPUT screen.
- **Short cut:** Instead of (1) and (2), press **CODE** + **RETURN**.

Adding a New Record



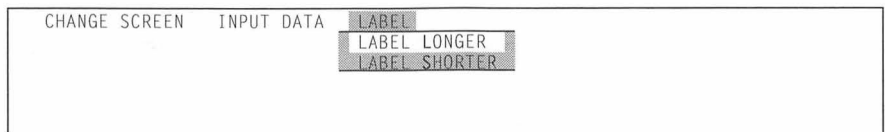
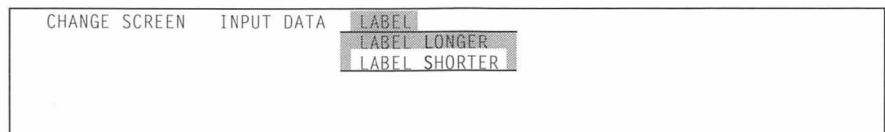
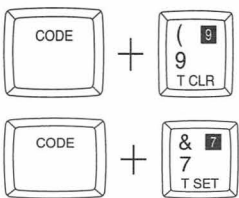
1. While viewing the DATA INPUT screen, press **MENU** to display the function menu.
 2. Use **←** and **→** to select INPUT DATA and press **RETURN** or **↓** to display the sub-menu.
 3. Use **↑** and **↓** to select NEW RECORD and press **RETURN**. You can start entering data for the new record. The new record will be at the bottom of the list when you return to view the ADDRESSBOOK screen.
- **Short cut:** Instead of (1), (2) and (3) press **CODE** + **N**.

Jumping to the Top or Bottom Record



1. While viewing the DATA INPUT screen, press **MENU** to display the function menu.
 2. Use **←** and **→** to select INPUT DATA and press **RETURN** or **↓** to display the sub-menu.
 3. Use **↑** and **↓** to select TOP RECORD or BOTTOM RECORD and press **RETURN**. The first or last record of the list will be displayed on the DATA INPUT screen.
- **Short cut:** Instead of (1), (2) and (3) press **CODE** + **G** (**GO TO**) and then **↑** to move the cursor to the top record, or **CODE** + **G** (**GO TO**) and then **↓** to move the cursor to the bottom record.

Changing the Width of a Column



1. While viewing the DATA INPUT screen, move the cursor to the data that is in the column which you want to make longer or shorter.
 2. Press **MENU** to display the function menu.
 3. Use **←** and **→** to select LABEL and press **RETURN** or **↓** to display the sub-menu.
 4. Use **↑** and **↓** to select LABEL LONGER or LABEL SHORTER and press **RETURN**. The width of the column will be increased or decreased by eight characters.
- **Short cut:** Instead of (2), (3) and (4), press **CODE** + **9** (**T CLR**) to increase, or **CODE** + **7** (**T SET**) to decrease.
 - The width of a single column must be in the range of between seven and 71 characters. The machine does not allow you to make a column narrower than the largest data already entered in that column.
 - The maximum width of a record is 244 characters.

The ADDRESSBOOK Screen

ADDRESS		KB:X	MEMORY:XX.XK	SHIFT	2:40PM
:1.	:2.	:3.	:4.	:5.	:6.
:MR/MS	:LAST NAME	:FIRST NAME	:TELEPHONE	:FAX NO.	:TITLE
*:Mr	:Anderson	:John	:231-638-7520	:	:
*:Mr	:Bennet	:William	:123-432-7530	:	:
*:Mr	:Higgins	:Joyce	:429-342-6754	:	:
You may retype label name and press RETURN. Press FILE to finish.					

The ADDRESSBOOK screen displays the list of records. The contents of the records cannot be edited here, but you can perform editing at a larger scale, like copying or moving records.

Moving the Cursor

When the cursor is on the label row: Use **←** and **→** to move the cursor horizontally across the labels. To move faster and scroll the screen, use **CODE** + **→** (**RELOC**), and **CODE** + **←** (**EXPR**).

When the cursor is on the data area: Use **↑** and **↓** to move the cursor vertically through the records. To move faster and scroll the screen, use **CODE** + **↓** (**NEXT S**), **CODE** + **↑** (**PRES**). Press **CODE** + **G** (**GO TO**) and then **↑** to move the cursor to the top record, or **CODE** + **G** (**GO TO**) and then **↓** to move the cursor to the bottom record.

Editing the Labels

The labels are the column headings. You may make changes to the label names if you wish.

1. Use the cursor keys to move the cursor to the desired label. You may now change the label name by retyping.
 - To correct, use **BS** , **CODE** + **0** (**W OUT**), and **CODE** + **=** (**L OUT**).
 - Use **CODE** + **BS** or the dead keys to superimpose characters (see "Superimposed Characters (Permanent Backspace)" on page 22) or to enter accented letter (see "Accents ("Dead" Keys)" on page 23). If necessary, use **CODE** + **K** (**KB**) to switch the keyboard (see "Switching the Keyboard" on page 21).

2. To move the cursor to the next label, press **TAB** or use . To move to the label to the left, use .
 3. To return to the data area, press or **RETURN**.
- *A label can be any string of characters. However, if you want to use this file for easy selection of a telephone number in the Communication mode, the column which contains the telephone numbers must have a label starting with "TELEPHONE". For example, "TELEPHONE No" is valid, but "Telephone" or "telephone" are not.*

Preparing the Records for Merge Printing

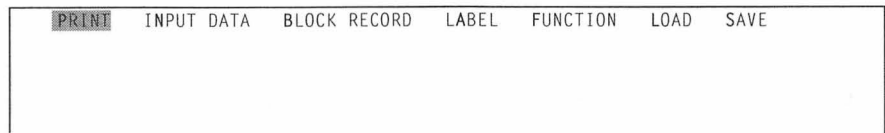
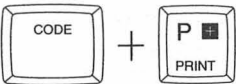
The Word Processing mode allows you to prepare master documents that contain merge symbols associated with a label number (see "Creating the Master Document" on page 84). When printing such a document, you will get as many copies as you have records in the Addressbook file. For the first copy, the machine will use the first record. For the second copy, the second record will be used, and so on. Each merge symbol in the master document will be automatically replaced with the data under the label specified by the merge symbol. For example, if you entered a merge symbol, and then typed "1" when creating the master document, that merge symbol will be replaced with the contents of the first column of the Addressbook file. When creating the master document, you should remember what kind of data you have in the different columns – or refer to a printout of the Addressbook file.

An asterisk (*) to the left of the first column indicates that a record is enabled for merge printing. You may select only particular records for printing, if you wish. A new record will always be automatically enabled. To disable a record, press **(SPACE BAR)**. The asterisk disappears. Pressing the same key will re-enable the record.

- *The asterisk can also be used to select records that you want to print in list printing mode (see "Printing the Addressbook File (PRINT)" on page 160).*

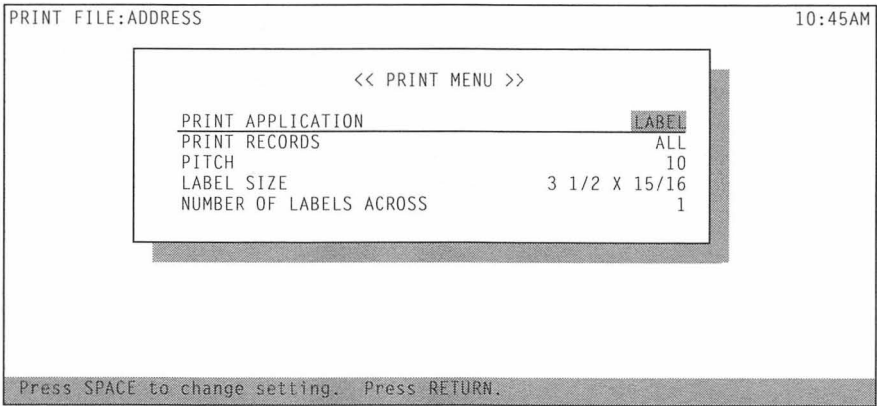
Using the Function Menu

Printing the Addressbook File (PRINT)



This machine offers two methods for printing the data of the Addressbook file: label or list.

- **Label** printing allows you to print formatted data (for example, Mr./Ms., first and last name on the first line, company on the second line, and address on the third line, then, city, state, zip code on the fourth line). The default format is set to match the size of the window on an envelope, but can be modified to fit other purposes.
- **List** printing is used to print a continuous list of data under selected labels.
 1. Press **MENU** to display the function menu.
 2. Use **←** and **→** to select PRINT and press **RETURN**. The ADDRESS PRINT MENU screen appears:



- **Short cut:** Instead of (1) and (2), press **CODE** + **P** (**PRINT**).
- 3. Use **↑** and **↓** to select a parameter, and **(SPACE BAR)** to set the selected parameter. Press **RETURN** to finish or **CANCEL** to return to the ADDRESSBOOK screen. The meaning of each setting is explained in the following table:

Addressbook Print Menu

Parameter	Options
PRINT APPLICATION	LABEL: To print formatted labels. LIST: To print the file.
PRINT RECORDS	ALL: To print all records. SELECTABLE: To print only enabled records.
PITCH	10, 12, or 15: Selects the pitch.
LABEL SIZE	3 1/2 x 15/16 or 4 x 1 7/16 Width x Height of the printout window. <i>This setting is ignored when you are printing the list.</i>
NUMBER OF LABELS ACROSS	1 or 2 This option allows you to print one or two columns of formatted data. <i>This setting is ignored when you are printing the list. If the label size is 4 x 1 7/16, the machine prints only one label across the page.</i>

The next operation depends on your choice for the first parameter (LABEL or LIST).

If you selected LABEL...

The POSITION SET PRINT MENU screen appears:

PRINT FILE:ADDRESS
11:27AM

<< POSITION SET PRINT MENU >>

* a. MR/MS
 * b. LAST NAME
 * c. FIRST NAME
 d. TELEPHONE
 e. FAX NO.
 f. TITLE
 * g. COMPANY
 * h. ADDRESS
 * i. CITY
 * j. STATE
 * k. ZIP

acb

g

h

ijk

Use cursor to select label name and press SPACE to set, BS to clear.
 Press RETURN to start printing.

On this screen, you can specify which Addressbook data will be printed in label format and the position of each data item. The data items are represented by the letters a through k (default), as shown on the left side of the screen (the items marked with an asterisk will be printed). The position of these letters in the label area on the right of the screen determine the position of the items when they are printed in label format.

The illustration above shows the default positions. For example, “acb” on the first line indicates that MR/MS (a) will be printed first, followed by the FIRST NAME (c) and the LAST NAME (b). A space is automatically inserted between each item. To print punctuation marks, such as a comma between city and state, you must include the punctuation mark when you enter the data on the DATA INPUT screen.

If you do not want to change the default label printing position, press **RETURN** to start printing.

To change the default label printing positions:

1. On the left side of the screen, move the block cursor to the data item you want to move or add. Press **(SPACE BAR)**. The cursor appears in the label area on the right side of the screen.
 2. Move the cursor to the position where you want the data item and press **RETURN**. The letter that represents the data item appears in the position you have selected in the label area, and the cursor returns to the data item list on the left side of the screen.
 3. Repeat steps 1 and 2 to reposition other data items. When you have completed the position changes, press **RETURN** to start printing.
 4. To remove an item from the label area, move the cursor to that item on the left side of the screen and press **BS**.
- *The total number of lines and maximum number of characters that you can print on a single line of a label is limited as follows:*

Limit on number and length of lines on a label

Printing Window Size	Number of lines	Pitch	Maximum length
3 1/2 x 15/16	5	10	34
		12	41
		15	51
4 x 1 7/16	8	10	39
		12	47
		15	59

If you selected LIST...

The LABEL SET PRINTER MENU screen appears:

PRINT FILE:ADDRESS		<< LABEL SET PRINT MENU >>				10:45AM
:MR/MS	:LAST NAME	:FIRST NAME	:TELEPHONE	:FAX NO.	:TITLE	
*:Mr	:Anderson	:John	:231-638-7520	:	:	
*:Mr	:Bennet	:William	:123-432-7350	:	:	
*:Mr	:Higgins	:joyce	:429-342-6754	:	:	

Use cursor to select label name and press SPACE to set, SPACE again to clear.
Press RETURN to start printing.

This screen allows you to select which data will be printed.

1. To select a column for printing, position the cursor over the label name using **←** and **→**, and press **(SPACE BAR)**. The same key is used to deselect. To switch all labels on, press **CODE** + **(SPACE BAR)**.
 - If the total length of the selected data exceeds the maximum length of a printable line, this message will appear:

Too wide to print.

2. Press **RETURN** to start printing or **CANCEL** to return to the PRINT MENU screen.

During Printing

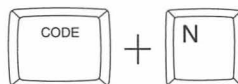


To cancel printing, press **CANCEL**. This will work only while the printer is printing, not while it is feeding paper.

Entering and Editing a Record (INPUT DATA)

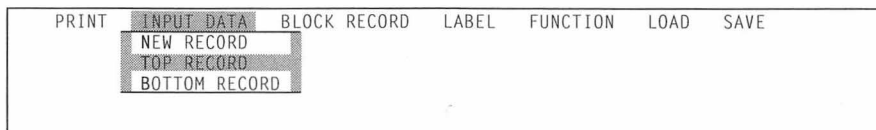
The INPUT DATA function allows you to add a new record, and to jump to the top or bottom record. You can also perform these operations from the DATA INPUT screen. For details, see “Adding a New Record” on page 156 and “Jumping to the Top or Bottom Record” on page 156.

Adding a New Record



1. Press **MENU** to display the function menu.
 2. Use **←** and **→** to select INPUT DATA and press **RETURN** or **↓** to display the sub-menu.
 3. Use **↑** and **↓** to select NEW RECORD and press **RETURN**. The machine displays the DATA INPUT screen and you can start entering data for the new record. The new record will be at the bottom of the list when you return to view the ADDRESSBOOK screen.
- **Short cut:** Instead of (1), (2) and (3), press **CODE** + **N**.

Jumping to the Top or Bottom Record

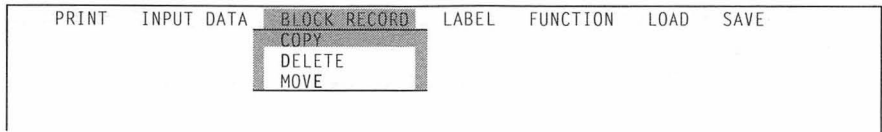
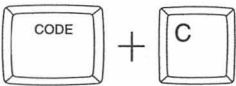


1. Press **MENU** to display the function menu.
2. Use **←** and **→** to select INPUT DATA and press **RETURN** or **↓** to display the sub-menu.
3. Use **↑** and **↓** to select TOP RECORD or BOTTOM RECORD and press **RETURN**. The machine switches to the DATA INPUT screen and displays the top or bottom record.

Block Record Operations (BLOCK RECORD)

The BLOCK RECORD function of the function menu allows you to copy, move or delete a block of continuous records. Before you start an operation on a block of records, you must first position the cursor on the first record of the block.

Copying Records



1. To copy records, position the cursor on the first record to be copied.
2. Press **MENU** to display the function menu.
3. Use **←** and **→** to select BLOCK RECORD and press **RETURN** or **↓** to display the sub-menu.
4. Use **↑** and **↓** to select COPY and press **RETURN**. The following message appears:

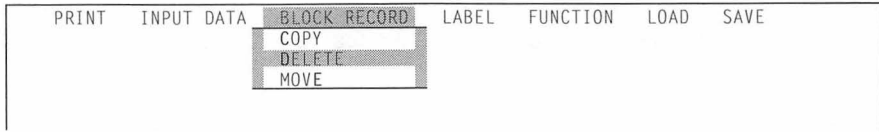
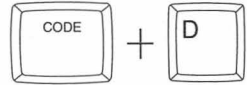
Highlight line(s) to be copied and press RETURN.

- **Short cut:** Instead of (2), (3) and (4), press **CODE** + **C**.
- 5. Use **↑** or **↓** to mark the records that you want to copy and press **RETURN**. This message will appear:

Move cursor to destination for blocked text and press RETURN.

6. Move the cursor to the destination position and press **RETURN**. The marked records are inserted at the destination position.
- Press **CANCEL** at any time to cancel the operation and return to the ADDRESSBOOK screen.

Deleting Records



1. To delete records, position the cursor on the first record to be deleted.
2. Press **MENU** to display the function menu.
3. Use **←** and **→** to select BLOCK RECORD and press **RETURN** or **↓** to display the sub-menu.
4. Use **↑** and **↓** to select DELETE and press **RETURN**. The following message appears:

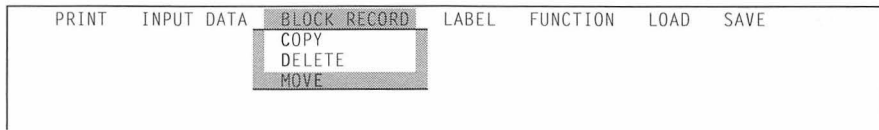
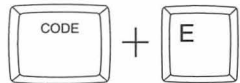
Highlight line(s) to be deleted and press RETURN.

- **Short cut:** Instead of (2), (3) and (4), press **CODE** + **D**.
5. Use **↑** or **↓** to mark the records that you want to delete and press **RETURN**. This message will appear:

Are you sure you want to delete? Press RETURN(yes) or CANCEL(no).

6. Press **RETURN** to delete the marked records, or **CANCEL** to quit.
- Press **CANCEL** at any time to cancel the operation and return to the ADDRESSBOOK screen.

Moving Records



1. Position the cursor on the first record to be moved.
2. Press **MENU** to display the function menu.
3. Use **←** and **→** to select BLOCK RECORD and press **RETURN** or **↓** to display the sub-menu.

4. Use **↑** and **↓** to select MOVE and press **RETURN**. The following message appears:

Highlight line(s) to be moved and press RETURN.

- **Short cut:** Instead of (2), (3) and (4), press **CODE** + **E**
- 5. Use **↑** or **↓** to mark the records that you want to move and press **RETURN**. This message will appear:

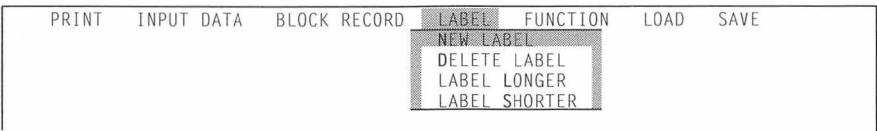
Move cursor to destination for blocked text and press RETURN.

6. Move the cursor to the destination position and press **RETURN**. The marked records are inserted at the destination position.
- Press **CANCEL** at any time to cancel the operation and return to the ADDRESSBOOK screen.

Entering and Editing a Label (LABEL)

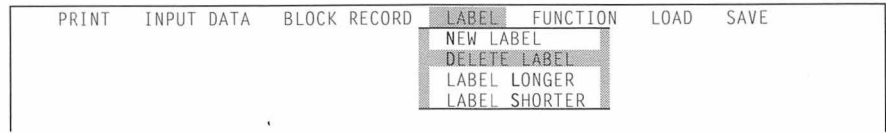
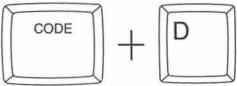
The LABEL function allows you to add a new label, delete a label and the data in its column, and modify the width of a column. The width of a column can also be modified on the DATA INPUT screen. For details, see “Changing the Width of a Column” on page 168.

Adding a New Label



1. Move the cursor to the label row.
2. Press **MENU** to display the function menu.
3. Use **←** and **→** to select LABEL and press **RETURN** or **↓** to display the sub-menu.
4. Use **↑** and **↓** to select NEW LABEL and press **RETURN**. The machine adds a blank column to the right of the last one. The cursor rests on the blank label so that you can start entering the new label.

Deleting a Column

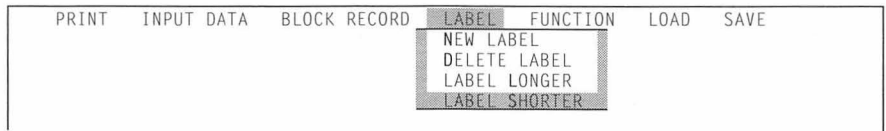
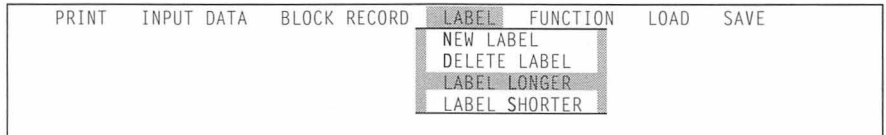
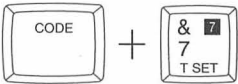
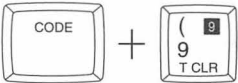


- 1. To delete one column, position the cursor on the label of the column to be deleted.
- 2. Press **MENU** to display the function menu.
- 3. Use **←** and **→** to select LABEL and press **RETURN** or **↓** to display the sub-menu.
- 4. Use **↑** and **↓** to select DELETE LABEL and press **RETURN**. The following message appears:

Are you sure you want to delete? Press RETURN(yes) or CANCEL(no).

- **Short cut:** Instead of (2), (3) and (4), press **CODE** + **D**.
- 5. Press **RETURN** to delete the column, or **CANCEL** to quit.
- Press **CANCEL** at any time to cancel the operation and return to the ADDRESSBOOK screen.

Changing the Width of a Column



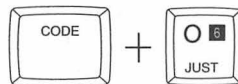
- 1. Move the cursor to the label of the column that you want to modify.

2. Press **MENU** to display the function menu.
 3. Use **←** and **→** to select LABEL and press **RETURN** or **↓** to display the sub-menu.
 4. Use **↑** and **↓** to select LABEL LONGER to increase the width, or LABEL SHORTER to decrease the width and press **RETURN**. The width of the selected column is increased or decreased by eight characters.
- **Short cut:** Instead of (2), (3) and (4), press **CODE** + **9** (**TCLR**) to increase, or **CODE** + **7** (**TSET**) to decrease.
 - The width of a single column must be in the range of between seven and 71 characters. The machine does not allow you to make a column narrower than the largest data already entered in that column.
 - The maximum width of a record is 244 characters.

Reorganizing Your File (FUNCTION)

The FUNCTION selection of the menu allows you to sort your data using two different sort keys, or to select records which satisfy specified conditions. The selected records can then be saved on diskette as a separate Addressbook file. This option also allows for inserting blank columns or records. It is also used to clear the Addressbook file in order to restart with a blank file or free space in the memory.

Sorting the Data




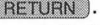





1. Press **MENU** to display the function menu.
2. Use **←** and **→** to select FUNCTION and press **RETURN** or **↓** to display the sub-menu.
3. Use **↑** and **↓** to select SORT and press **RETURN**. The following message appears:





Move cursor to primary sort label and press RETURN.

- **Short cut:** Instead of (1), (2) and (3), press **CODE** + **0**.
4. Use **←** or **→** to select the label used as the primary sort key and press **RETURN**. For example, if you want the data to be sorted in alphabetic order of the last names, position the cursor on the label "LAST NAME" and press **RETURN**. This message will appear:

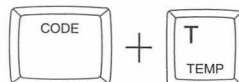
Move cursor to secondary sort label and press RETURN.

- Use  or  to select the label used as the secondary sort key and press . For example, if you want the data for people having the same last name to be sorted internally in alphabetic order of the first names, position the cursor on the label "FIRST NAME" and press . If you do not want this internal sort to take place, leave the cursor on "LAST NAME" and press . This message will appear:






Use cursor to select. Press RETURN.
 

- Use  and  to select ASCENDING (natural alphabetic order) or DESCENDING (reverse alphabetic order) and press . The data is sorted and the result of the operation appears on the screen.
- Press  at any time to cancel the operation and return to the ADDRESSBOOK screen.
- Accented letters and superimposed characters are sorted according to the base character.
- The sort operation is irreversible. For example, if you have entered records one after the other (not using the copy function described on page 165), your records will be in chronological order, the last entered being at the bottom of the list. If you sort the file, you will never be able to restore that initial order automatically. In case you want to be able to restore the initial order, you must add a new label and number the records in the order they are entered. When you sort the data using that numbering column as primary and secondary key, the initial order will be restored.

Selecting Records



PRINT	INPUT DATA	BLOCK RECORD	LABEL	FUNCTION	LOAD	SAVE
						

- Press  to display the function menu.
- Use  and  to select FUNCTION and press  or  to display the sub-menu.

- Use **↑** and **↓** to choose SELECT and press **RETURN**. The SELECT screen, similar to the DATA INPUT screen appears:

ADDRESS
KB:X
INS SHIFT
10:45AM

SELECT MENU

MR/MS
LAST NAME
FIRST NAME
TELEPHONE
FAX NO.
TITLE
COMPANY
ADDRESS
CITY
STATE
ZIP

Type select condition. Press TAB to start select.

- Short cut:** Instead of (1), (2) and (3), press **CODE** + **T**.

The SELECT screen allows you to input the selection conditions. You may enter more than one condition. For example, if you want to select the records of people living in Atlanta and working for a company called "XYZ INC.", type "Atlanta" in the entry field CITY, and "XYZ INC." in the entry field COMPANY. People working for XYZ INC, but living in Portland will not be selected. People living in Atlanta, but working for a different company will not be selected.

- For this function to work correctly, you should be careful to use consistent formats when you enter your records and the selection conditions. Be careful about the capitalization. For this machine, "Atlanta", "ATLANTA", and "atlanta" are different strings.*
- Enter your conditions. Proceed as when entering data on the DATA INPUT screen. For details, see "Entering and Editing a Record (INPUT DATA)" on page 164.
 - Press **TAB** to start the operation. After a while, the ADDRESSBOOK screen displays the selected data.
- If the machine could not find records satisfying your conditions, this message will appear:*

Record(s) not found.

Once the selected data is displayed, you have several options:

- Press **CANCEL** to display the original data again.
- You may print the selected data. For details, see "Printing the Selected Data" on page 172.
- You may save the selected data on diskette. For details, see "Saving the Selected Data on Diskette" on page 172.

Printing the Selected Data



PRINT	SAVE
-------	------

1. With the selected data displayed, press **MENU** to display the function menu. Only two functions are available: PRINT and SAVE.
2. Use **←** and **→** to select PRINT and press **RETURN**.
- **Short cut:** Instead of (1) and (2), press **CODE** + **P** (**PRINT**).

Saving the Selected Data on Diskette



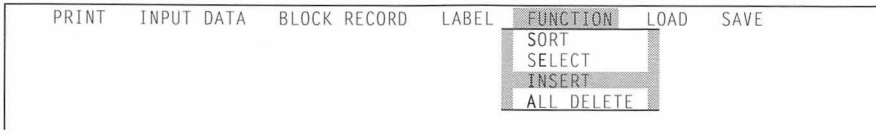
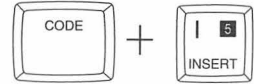
PRINT	SAVE
-------	------

1. Insert a diskette in the drive.
2. With the selected data displayed, press **MENU** to display the function menu. Only two functions are available: PRINT and SAVE.
3. Use **←** and **→** to select SAVE and press **RETURN**. The machine will not ask you to enter a file name. The selected data will automatically be saved on the diskette under the file name "SELECT.MRG"
- **Short cut:** Instead of (2) and (3), press **CODE** + **S**.
- You can have only one "SELECT.MRG" file on a diskette. If you have already saved selected data on the diskette, this message will appear:

Overwrite. Press RETURN to overwrite.

Press **RETURN** to overwrite, or **CANCEL** if you do not want the old selected data to be replaced on the diskette. You can change the diskette and repeat steps (1) to (3) to save on another diskette.

Inserting a Blank Column or Record

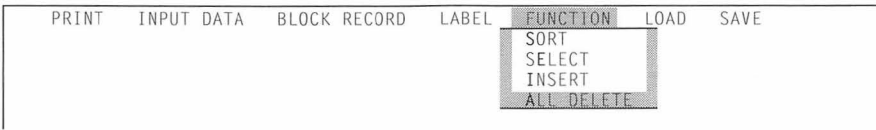


1. To insert a **blank column**, position the cursor on the **label** where you want to insert a blank column.
To insert a **blank record**, position the cursor on the **record** where you want to insert a blank record.
 2. Press **MENU** to display the function menu.
 3. Use **←** and **→** to select **FUNCTION** and press **RETURN** or **↓** to display the sub-menu.
 4. Use **↑** and **↓** to select **INSERT** and press **RETURN**. The insertion takes place immediately.
- **Short cut:** Instead of (2), (3) and (4), press **CODE** + **I** (**INSERT**).

When you insert a blank **column**, the column which was initially selected and all columns to the right are pushed to the right. A blank column of 15 characters and an empty label appear. The cursor rests on the blank label so that you can immediately input a new label.

When you insert a blank **record**, the record which was initially selected and all records below are pushed down. The cursor rests on the blank record so that you can immediately press **RETURN** and enter the data on the DATA INPUT screen.

Deleting the File

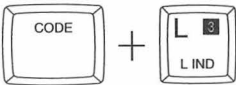


1. Press **MENU** to display the function menu.
2. Use **←** and **→** to select **FUNCTION** and press **RETURN** or **↓** to display the sub-menu.
3. Use **↑** and **↓** to select **ALL DELETE** and press **RETURN**. This message will appear:

Delete all? Press RETURN(yes) or CANCEL(no).

4. Press **RETURN** to clear the file, or **CANCEL** to quit.

Loading a File from a Diskette



PRINT	INPUT DATA	BLOCK RECORD	LABEL	FUNCTION	LOAD	SAVE
-------	------------	--------------	-------	----------	------	------

Before loading a file, remember that the memory can store only one Addressbook file. If you load a file from a diskette before saving the current file on a diskette, the current file will be erased. See “Saving the Addressbook File on Diskette” on page 175.

- 1. Insert the diskette containing the file you wish to use.
- 2. Press **MENU** to display the function menu.
- 3. Use **←** and **→** to select LOAD and press **RETURN** to display the DISK INDEX screen. Only the Addressbook files (extension .MRG) will be displayed.

DISK INDEX		REMAIN:XXXX.XK		SHIFT	11:45AM
123	.MRG (1.5)	1990	.MRG (1.5)	1992	.MRG (3.0)
1995	.MRG (3.0)	ABC	.MRG (2.0)		

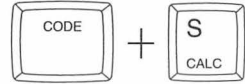
Select a file and press RETURN.

- **Short cut:** Instead of (2) and (3), press **CODE** + **L**.
- 4. Use the cursor key to select the file that you want to load and press **RETURN**. If there is no data in the Addressbook file in the memory, loading starts immediately. If there is a data in the Addressbook in the memory, this message appears:

Erase current file and load file from disk? Press RETURN(yes) or CANCEL(no).
--

- Since you can have only one Addressbook file in the memory, loading a file from diskette will delete the current file in memory.
- 5. If you have not saved the current file, this is your last chance. Press **CANCEL** to return to the ADDRESSBOOK screen. If you have already saved the current file, press **RETURN** to overwrite the selected file.
- 6. After the file is loaded, the machine switches to the ADDRESSBOOK screen and displays the loaded file.

Saving the Addressbook File on Diskette



PRINT	INPUT DATA	BLOCK RECORD	LABEL	FUNCTION	LOAD	SAVE
-------	------------	--------------	-------	----------	------	------

1. Insert the diskette you wish to save the file on.
2. Press **MENU** to display the function menu.
3. Use **←** and **→** to select **SAVE** and press **RETURN**. This message will appear:

Type filename and press RETURN. FILENAME: XXXXXXX■.MRG

- If the file has never been saved on diskette under a specific file name, the displayed file name is ADDRESS.MRG. If the file has been previously saved on diskette under a specific file name, and then loaded into the memory for further editing, that file name will be displayed.
 - **Short cut:** Instead of (2) and (3), press **CODE** + **S**.
4. Type a file name (for details, see "Entering a File Name" on page 238), and press **RETURN**. The extension ".MRG" will be automatically added to the file name. Press **CANCEL** to cancel the save operation and return to the ADDRESSBOOK screen.
 5. Press **CODE** + **MENU** (**FILE**) to return to the MAIN MENU screen.

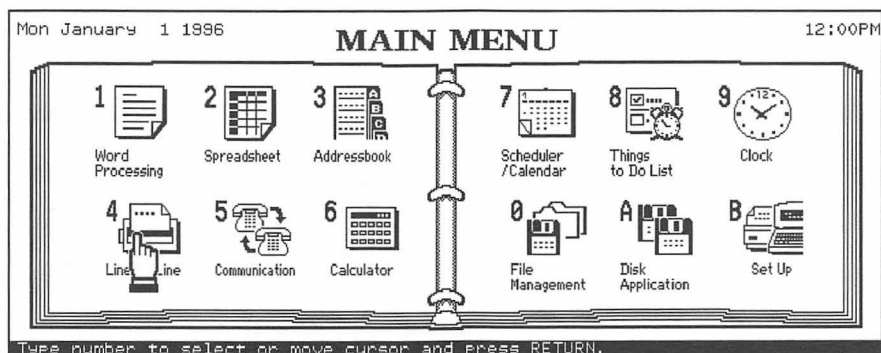
Line by Line

Printing a Line at a Time as You Type

In the Line by Line mode, your machine allows you to type on paper without storing. You type your text line by line. The line is automatically transferred to the printer after completion. Since your text is not kept in memory, this mode will be used to type short texts like addresses on envelopes or short memos.

How to Start?

1. Make sure that your printer is connected and that the printer parameters are correctly set. See "Printer Set Up" on page 312 for details.
2. Switch the machine on to display the MAIN MENU.



3. Type "4" or move the cursor to 4. Line by Line using the cursor keys and press **RETURN**. The LINE BY LINE screen shown on the next page appears.

Using the Line by Line Mode

Type your text. Check that the printer is ONLINE and press **RETURN** to send the line to the printer. You can now start typing the next line.

You are allowed to set the margins and to use some layout functions. For details see:

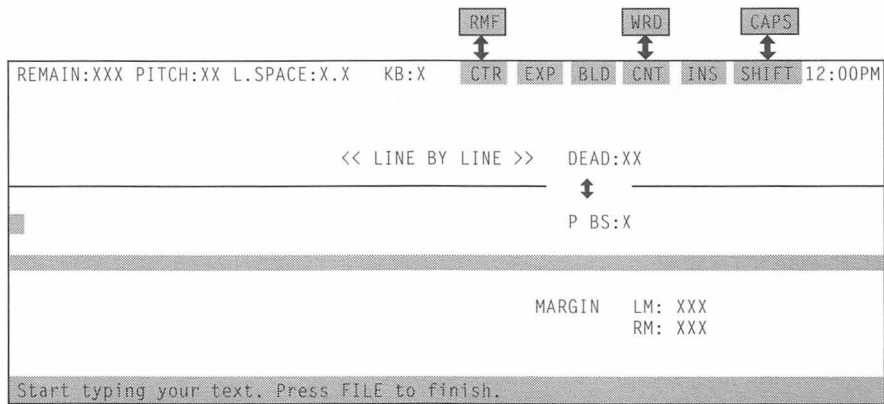
- "Setting Up" on page 180
- "Layout Functions" on page 182
- "Printer Set Up" on page 312

How to Finish

After typing your text, press **CODE** + **MENU** (**FILE**) to print the text and return to the MAIN MENU.

- You should make sure that the printer is ONLINE before pressing **CODE** + **MENU** (**FILE**).

The LINE BY LINE Screen



Status Line

The status line indicators remind you where you are and what settings you have selected.

Indicators of the LINE BY LINE screen

Indicator	Meaning
REMAIN:XXX	Characters remaining before reaching right margin.
PITCH:XX	Current pitch (10, 12, or 15).
L.SPACE:X.X	Current line spacing (1.0, 1.5, or 2.0).
KB:X	Current keyboard selection (I or II).
SHIFT	On if the keyboard is in uppercase mode.
CAPS	On if the keyboard is in caps lock mode.
INS	On when the insert mode is activated.
EXP	On when the expand function is activated.
P BS:X	Displays the superimposed character when the cursor is on the base character.
DEAD:XX	Displays the dead character when the cursor is on the base character.
BLD	On when the bold function is activated.
CNT	On when the continuous underline function is activated.
WRD	On when the word underline function is activated.
RMF	On when the right margin flush function is activated.
CTR	On when the centering function is activated.
LM:XXX	Indicates the left margin setting (under the text line).
RM:XXX	Indicates the right margin setting (under the text line).

Text Line

This is where the text that you type will appear. The text cursor (solid box) indicates where you are. The text is sent to the printer and disappears from the text line when you press **RETURN**.

Message Area

This line is reserved for guide messages (prompts) that ask you a question, give direction or display error messages that warn you when something is wrong.

- For a list of error messages, see “Error Messages” on page 319.

Function Menu

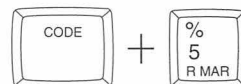
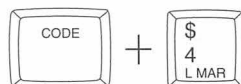


When you press **MENU**, a menu of functions appears on top of the screen. These functions are identical to the **STYLE** and **CTR/RMF** functions of the Word Processing mode.



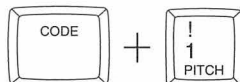
Setting Up

Setting Margins



1. Press **CODE** + **4** (**L MAR**) or **CODE** + **5** (**R MAR**). The cursor moves to the MARGIN indicator.
 2. Use **↑** and **↓** to move the cursor to the left or right margin setting. Type the desired setting and press **RETURN**. Press **CANCEL** to return to the input line without changing the settings.
- *The margins are automatically stored into the memory. The previous settings will reappear each time you start the Line by Line mode.*

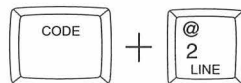
Selecting the Pitch



Press **CODE** + **1** (**PITCH**) repeatedly to select PITCH:10, PITCH:12, or PITCH:15.

- *The pitch can be changed only before entering text on the screen.*
- *The pitch is automatically stored in the memory. (The previous setting will reappear each time you start the Line by Line mode.)*

Selecting the Line Space



Press **CODE** + **2** (**LINE**) repeatedly to select L. SPACE:1.0, L. SPACE:1.5, or L. SPACE:2.0.

- *The line space is automatically stored in the memory. The previous setting will reappear each time you start the Line by Line mode.*

Corrections



To delete a character on the line, move the cursor to the right of the character and press **BS**.

To delete an entire word, position the cursor next to the last character of the word and press **CODE** + **D** (**W OUT**).

To delete an entire line, position the cursor next to the last character of the line and press **CODE** + **=** (**L OUT**).

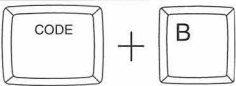
To insert text, position the cursor at the insertion position, press **CODE** + **I** (**INSERT**) to display the INS indicator, and start typing. When the INS indicator is off, the characters that you type overwrite the old ones.

Layout Functions

Adding Effects (STYLE)

The effects provided by the STYLE option on the function menu allow you to enhance the appearance of your document. They include bold characters, underlining, automatic insertion of blanks (expand), as well as superscripts and subscripts.

Bold Face Characters

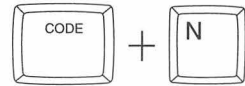


STYLE	CTR/RMF	
BOLD	OFF	(ON)
UNDERLINE	OFF	(CNT) (WRD)
EXPAND	OFF	(ON)
SUPER SUB ON/OFF	OFF	(SUPER) (SUB)

1. If you want to turn the bold function on before typing, skip this step. If you want to change the type face of a portion of text already typed, position the cursor at the beginning of that portion.
2. Press **MENU** to display the menu.
3. Use **←** and **→** to select STYLE, and press **RETURN** or **↓**.
4. Use **↑** and **↓** to select BOLD.
5. Use **(SPACE BAR)** to turn the bold function ON.
6. Press **RETURN**. The BLD indicator is now on.
 - **Short cut:** Instead of (2), (3), (4), (5) and (6), press **CODE** + **B** to switch the bold function ON/OFF.
7. The text you now type or the text you scan by moving the cursor right is displayed in bold. If you move the cursor past the desired position, move back to unmark. To move the cursor to the beginning or the end of the line, **CODE** + **←** (**EXPR**) and **CODE** + **→** (**RELOC**).
8. To return to normal typing, repeat steps (2), (3), (4), (5) and (6) to turn the bold function OFF, or press **CODE** + **B**.
 - To undo bold characters, position the cursor just after the last bold character, turn the bold function ON, and move the cursor to the left. Turn the bold function OFF to stop undoing bold.

Using the **Boldface** is a way of making a Word, Phrase or entire Paragraph stand out and catch the reader's eye. The **Boldface** feature has a

Underlining



STYLE	CTR/RMF	
BOLD	OFF	(ON)
UNDERLINE	OFF	(CNT) (WRD)
EXPAND	OFF	(ON)
SUPER SUB ON/OFF	OFF	(SUPER) (SUB)

- If you want to turn the underline function on before typing, skip this step. If you want to underline a portion of text already typed, position the cursor at the beginning of that portion.
- Press **MENU** to display the menu.
- Use **←** and **→** to select STYLE, and press **RETURN** or **↓**.
- Use **↑** and **↓** to select UNDERLINE.
- Use **(SPACE BAR)** to select CNT (continuous underlining) or WRD (word underlining).
- Press **RETURN**. The corresponding indicator is now on.
 - Short cut:** Instead of (2), (3), (4), (5) and (6), press **CODE** + **N** to switch the underline function CNT/WRD/OFF.
 - If you select continuous underlining, all will be underlined, including blank spaces. With word underlining, blank spaces are not underlined.
- The text you now type or the text you scan by moving the cursor right is underlined. If you move the cursor past the desired position, move back to remove the underline. To move the cursor to the beginning or the end of the line, **CODE** + **←** (**EXPR**) and **CODE** + **→** (**RELOC**).
- To return to normal typing, repeat steps (2), (3), (4), (5) and (6) to turn the underline function OFF, or press **CODE** + **N**.
 - To undo underlining, position the cursor just after the last underlined character, select the same option (CNT or WRD), and move the cursor to the left. Turn the underline function OFF to stop removing underlining.

Continuous Underline

Using the Underline is a way of making a Word, Phrase or entire Paragraph stand out and catch the reader's eye. The Underline feature has a

Word Underline

Using the Underline is a way of making a Word, Phrase or entire Paragraph stand out and catch the reader's eye. The Underline feature has a

Typing Expanded Text

STYLE	CTR/RMF	
BOLD	OFF	(ON)
UNDERLINE	OFF	(CNT) (WRD)
EXPAND	OFF	(ON)
SUPER SUB ON/OFF	OFF	(SUPER) (SUB)

The expand function is used only while typing. You cannot use it to reformat text that has been typed.

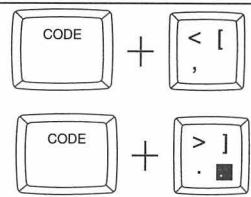
1. Press **MENU** to display the menu.
 2. Use **←** and **→** to select STYLE, and press **RETURN** or **↓**.
 3. Use **↑** and **↓** to select EXPAND.
 4. Use **(SPACE BAR)** to turn the function ON.
 5. Press **RETURN**. The EXP indicator is now on.
 6. The text you now type is expanded, that is, a permanent space is automatically inserted after each text character.
 7. To return to normal typing, repeat steps (1), (2), (3), (4) and (5) to turn the expand function OFF.
- *The permanent spaces inserted with the expand function cannot be removed automatically. To undo the expand format, delete the permanent spaces one by one using **BS**.*

C O P Y

Expand

This letter was typed on this new Work Organizer to show you some of the many outstanding feats it can perform.

Superscripts and Subscripts



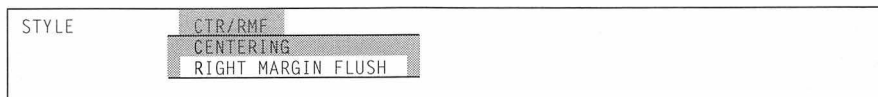
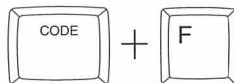
STYLE	CTR/RMF	
BOLD	OFF	(ON)
UNDERLINE	OFF	(CNT) (WRD)
EXPAND	OFF	(ON)
SUPER SUB ON/OFF	OFF	(SUPER) (SUB)

You may enter and print superscripts and subscripts.

- Characters in superscript and subscript are displayed on the same line as normal characters, but only half of the cursor appears (upper-half for superscripts, and lower-half for subscripts).
 - With laser printers, superscripts and subscripts are printed the same distance (1/12 inch) above or below the line, regardless of the current line spacing. They are printed the same size as the normal text characters. With dot matrix and inkjet printers, superscripts and subscripts are smaller than normal text characters.
1. Move the cursor to the position where you want to type a superscript (or subscript).
 2. Press **MENU** to display the menu.
 3. Use **←** and **→** to select STYLE, and press **RETURN** or **↓**.
 4. Use **↑** and **↓** to select SUPER SUB ON/OFF.
 5. Use **(SPACE BAR)** to select SUPER or SUB.
 6. To return to normal typing, repeat steps (2) to (5) to switch the function OFF.
- To undo superscripts or subscripts, turn the function OFF and retype the characters.
 - **Short cut:** Instead of the above procedure, use **CODE** + **⏏** and **CODE** + **⏏**.
 - Each pair of keys (**CODE** + **⏏** and **CODE** + **⏏**) cancels the other, and the two pairs must always be used in combination.

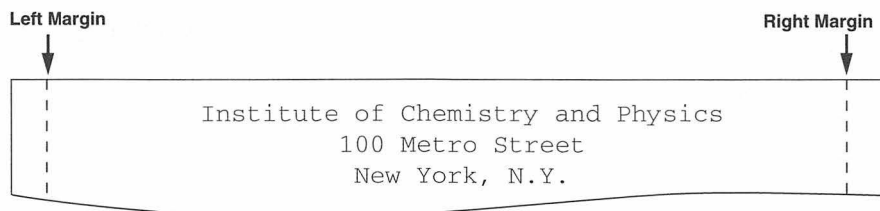
Centering and Right Margin Flush Functions (CTR/RMF)

Centering

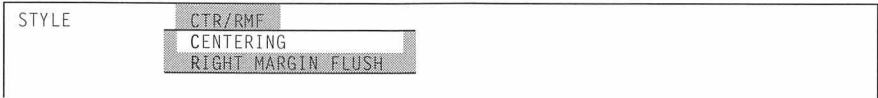
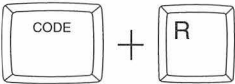


The centering function is used to center headlines or titles between the margins.

1. Press **MENU** to display the menu.
2. Use **←** and **→** to select CTR/RMF, and press **RETURN** or **↓**.
3. Use **↑** and **↓** to select CENTERING and press **RETURN**. The CTR indicator shows up.
- **Short cut:** Instead of (1), (2) and (3), press **CODE** + **F**.
4. Type your text and press **RETURN**.
- Pressing **CANCEL** or **CODE** + **F** switches back to the normal mode.

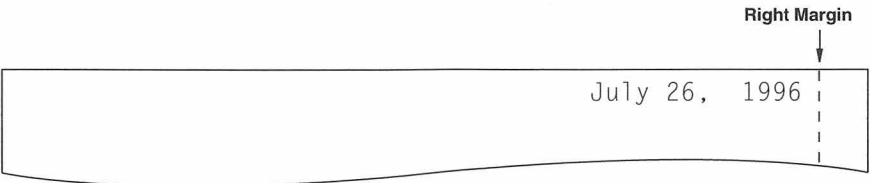


Right Margin Flush



The right margin flush function is used to have the last character of a line exactly on the right margin. This is used, for example, to type the date of a letter.

- 1. Press **MENU** to display the menu.
- 2. Use **←** and **→** to select CTR/RMF, and press **RETURN** or **↓**.
- 3. Use **↑** and **↓** to select RIGHT MARGIN FLUSH and press **RETURN**. The RMF indicator shows up.
- **Short cut:** Instead of (1), (2) and (3), press **CODE** + **R**.
- 4. Type your text and press **RETURN**.
- Pressing **CANCEL** or **CODE** + **R** switches back to the normal mode.



Communication

The Communication Mode

In the Communication mode, you can transfer files between your unit and a personal computer. You can also transfer files between two Brother units if both units offer communications. You are able to attach a cable between the two units to transfer files, or you can communicate with a unit at a distant location by using the telephone line and a modem. The most popular use of this feature is to exchange messages and files with friends and obtain access to commercial data bases and electronic mail services such as CompuServe. When you use the Communication mode, the data is converted at each end of the line to ensure automatic compatibility. The Brother communication mode uses TTY emulation only.

Before You Start

Purchase a Modem

In order to use the Communication mode by connecting your machine to a computer through the telephone line, you need to connect a modem between your machine and the telephone line. For details about compatible modems and connections, see "Modem" on page 9.

- ***If you own a personal computer and want to use the Communication mode for data transfer between two machines at the same location, you do not need a modem. Your computer must be equipped with an RS-232C connector, and a communication program. Connect the RS-232C ports with a NUL MODEM cable as explained on page 10. The procedures for data transfer between the two machines are the same as when you use a modem, except that you do not need to dial.***

If you want to use Information Services...

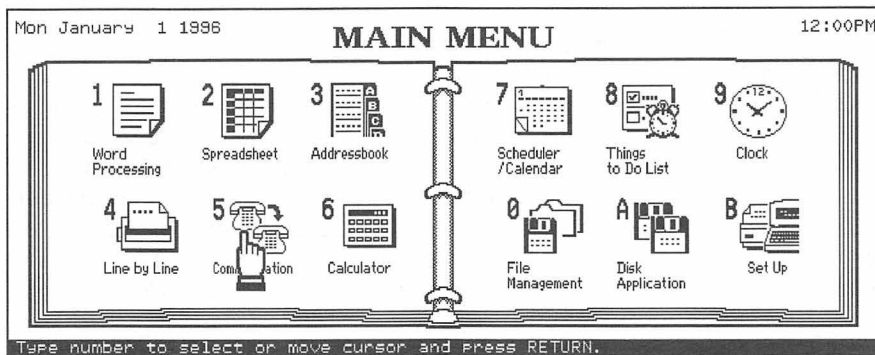
Before trying to access CompuServe or other data base or electronic mail service, you must establish an account with the desired service and receive an ID name and password.

NOTE:

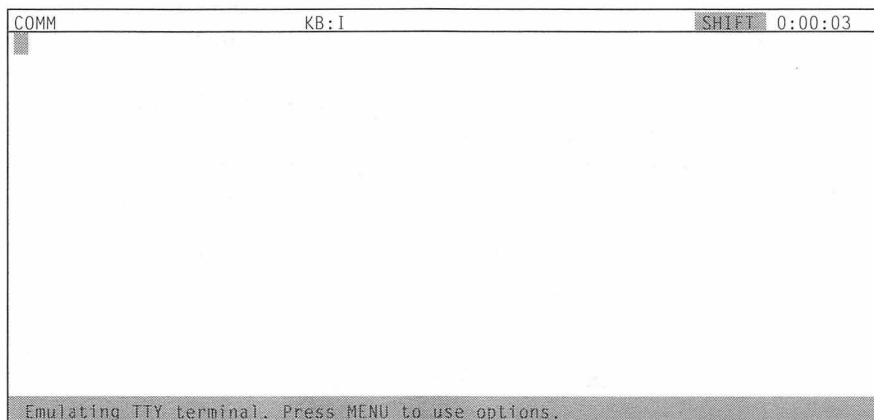
This machine is text-based and any graphic data or any binary files from a commercial communication service such as CompuServe cannot be viewed or downloaded.

How to Start?

1. Switch the machine on to display the MAIN MENU.



2. Type "5" or move the cursor to 5. Communication using the cursor keys and press **RETURN**. The COMMUNICATION screen shown appears.



- The COMMUNICATION screen does not show the current time. Instead, it shows the time elapsed from the moment you entered the COMMUNICATION mode in the format "hour:minute:second".

The Function Menu



Press **MENU** to display four main functions, use **←** and **→** to move the cursor to the desired function, then **RETURN** or **↓** to display a sub menu. Use **↓** and **↑** to select a function on a sub menu, and **RETURN** to execute the function. Accelerators can be used to select and execute a function quickly. Short-cut keys can be used to bypass the function menu. See the table below for a complete list of functions.

- When the cursor is on **EXIT**, pressing **↓** produces a beep, and pressing **RETURN** switches to the **MAIN MENU**.

Function Menu of the COMMUNICATION screen

Function Menu	Sub-menu	Short-cut Key	Page
OPTIONS	COMPUSERVE	CODE + C	200
	SET UP	CODE + T	194
	VIEW LAST PAGE	CODE + ↑ (PRES)	209
	INFORMATION LOAD	CODE + L	198
	INFORMATION SAVE	CODE + S	197
	DEFAULT SETTING	No short cut	199
PHONE	DIAL	CODE + D	203
	DISCONNECT	No short cut	207
SEND	SEND WP TEXT(W/ASCII) NO PROTOCOL	No short cut	210
	SEND WP TEXT(W/ASCII) XMODEM	No short cut	210
	SEND WP TEXT(.WPT)	No short cut	210
RECEIVE	RECEIVE ASCII FILE NO PROTOCOL	No short cut	211
	RECEIVE ASCII FILE XMODEM	No short cut	211
	RECEIVE WP TEXT (.WPT)	No short cut	211
EXIT	No submenu	CODE + MENU (FILE)	193

Communication Session

A communication session involves three separate steps: setting up the communication parameters, dialing (or being dialed), and transmitting/receiving. When you call an information service, you must also identify yourself with a “log-in”.

- Set up:** Communicating through a modem is very similar to a telephone conversation between two people. In order to make the conversation possible, some rules must be observed. For example, both persons will speak the same language and will agree to speak one at a time. When communicating through modems, some parameters like baud rate (bits per second) and parity must have the same setting at each end of the line.

When you subscribe to an information service, you receive a list of the settings that you are supposed to use. If you use different settings, the host computer will not adjust automatically, and communication will be impossible.

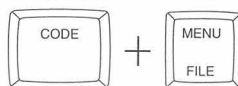
Before you try to communicate with a friend, agree on the settings that you will use. For more details about the setting, see "Set Up" on page 194.

2. **Being dialed:** The Terminal mode of your unit must be displayed on the screen when someone is dialing you. If you are working with your unit or if you are already communicating with someone, your machine cannot be dialed.
3. **CompuServe:** Once phone number, user ID and password are set up, the COMPUSERVE option on the option submenu allows you to quickly and easily access CompuServe. For more details about the COMPUSERVE option, see "Using CompuServe" on page 200. (This function is available only in countries where CompuServe provides their service.)
4. **Dialing:** This machine performs automatic dialing. This means that you do not have to manually dial a number on the phone but type it on the screen. To make this procedure even easier, you can select the phone number from the current Addressbook file.

An information service can usually be dialed at any time. The same is not always true when transferring a file to a friend's personal computer. Before dialing a friend, call him by phone to make sure that his computer is ready. For more details about dialing, see "Dialing" on page 203.

- *When sending a file to a personal computer that is connected to your unit by a NUL MODEM cable, dialing is not necessary.*
5. **Auto log-in:** The log-in data contains the information that allows an information service to identify you. This machine allows you to record the log-in data as you enter it on the screen when requested to do so by the information service. Once the log-in data has been recorded, the machine will automatically transmit it after dialing.
 6. **Transmitting/Receiving messages and files:** Once you are connected, the text that you type is transmitted and the text that is received is displayed on your screen. Optionally, the text that is transmitted can be "echoed" back to your screen for confirmation.
You can transmit the contents of a Word Processing file or store the information received in a memory file. For more details about reception and transmission, see "Sending a File" on page 210 and "Receiving a File" on page 211.

How to Finish?



OPTIONS PHONE SEND RECEIVE EXIT

1. On the COMMUNICATION screen, press **MENU** to display the function menu.
2. Use **←** and **→** to select EXIT and press **RETURN**. If the telephone line is connected, this message will appear:

Disconnecting? Press RETURN(yes) or CANCEL(no).

3. Press **RETURN** to return to the MAIN MENU, or **CANCEL** to stay in the COMMUNICATION mode.
- Instead of steps (1) and (2), press **CODE** + **MENU** (**FILE**).

About the Communication Files

Communication files are used to store the communication setting. The file currently in the memory is active. You can edit it and use it for automatic dialing. You can have only one Communication file in the memory. The file is automatically updated in the memory as you edit it or load another Communication file from a diskette.

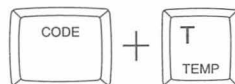
If you need to work on a different Communication file, save the current file to a diskette. For details, see “Saving the Communication File on Diskette” on page 197. The machine will ask you to enter a file name under which the file will be saved on the diskette. After saving the current file, you can clear all the data and start creating a new file.

When you retrieve a Communication file from a diskette, the current file is automatically deleted and replaced with the file that you load. For details, see “Loading a Communication File from Diskette” on page 198.

The file name of the Communication file is displayed at the upper-left corner of the COMMUNICATION and SET UP screens. The default file name of a new Communication file is “COMM.CPF”. If the Communication file has been saved on diskette, then loaded back into the memory, the file name under which you saved the file on diskette is displayed.

A Communication file contains the settings for the phone number, the parameters described on page 195, and the log-in data described on page 205.

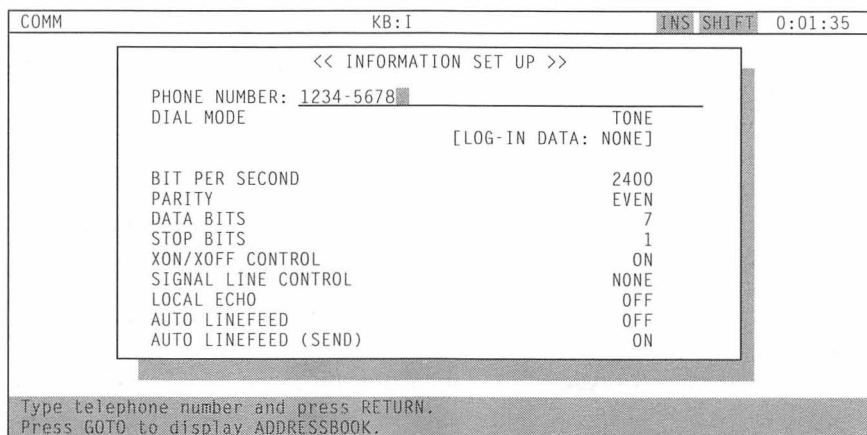
Set Up



The SET UP screen allows for several settings. You do not have to completely understand these settings in order to communicate. If you communicate with an information service, set the parameters as specified by the information service. If you communicate with a friend using the same machine, you may use the default settings, except for AUTO LINEFEED SEND which must be set to ON (see below for details). If you communicate with a friend using a different machine, conform with his settings.

To set up the machine, proceed as follows:

1. On the COMMUNICATION screen, press **MENU** to display the function menu.
2. Use **←** and **→** to select OPTIONS and press **RETURN** or **↓**. The submenu appears.
3. Use **↑** and **↓** to select SET UP and press **RETURN**. The SET UP screen appears.



- **Short cut:** Instead of (1), (2) and (3), press **CODE** + **T**.
- 4. On the SET UP screen, use **↑** and **↓** to select a parameter, **(SPACE BAR)** to select the setting, and press **RETURN** to return to the COMMUNICATION screen. The settings are stored in the memory.

- To return to the **COMMUNICATION** screen without saving the setting, press **CANCEL**. The old settings will be restored.

The following shows the details for each communication parameter and available settings. The underline shows the default settings.

- **PHONE NUMBER (no default)**
Enter the phone number in this field.
- **ID and Password**
The log-in data (ID and password) cannot be edited on the SET UP screen. They can, however, be automatically recorded and included to your Communication file during manual log in. See "Connecting through the Phone Line" on page 203. The SET UP screen only tells you whether or not the log-in data has been recorded.
- **DIAL MODE (TONE or PULSE)**
This parameter must be set to TONE or PULSE to match the type of your telephone.
- **BIT PER SECOND (BAUD RATE) (300, 600, 1200, 2400, 4800, 9600)**
This parameter determines the transmission speed in bits per second. For example, if you are transmitting 8-bit characters with a single stop and start bit, each character will use 10 bits. If you select the baud rate 1200, the machine will, in principle, transmit about 120 characters per second (or about one page of 1200 characters in ten seconds). Since the data has to be checked for transmission errors, and eventually echoed back, the overall transmission speed is usually lower than this figure. In general, increasing the baud rate also increases the risk of transmission errors, specially on noisy lines.
- **PARITY (NO, ODD, EVEN, SPACE, MARK)**
This determines how the bits of each character are checked for transmission errors.
This machine does not perform any parity check during reception.
NO: No parity bit is added to the characters.
EVEN: The machine counts the number of non zero bits in a character. If this number is even, the parity bit is set to zero, and to one otherwise. This way, all "words" (characters + parity bit) will have an even number of non zero bits. The receiving unit must have the same parity setting and expects only words with an even number of non zero bits. When this number is odd, the receiving machine knows that something is wrong (for example, one bit has been spoiled by noises on the line).
ODD: This is the opposite of the EVEN parity. A parity bit is set so that the total number of non zero bits is odd.
SPACE: (Possible only when DATA BITS=7). The parity bit is always zero.
MARK: (Possible only when DATA BITS=7). The parity bit is always one.

- **DATA BITS (7, 8)**

This determines how many bits are necessary to encode the characters. Standard ASCII characters use seven bits. Accented letters and other special characters need eight bits.

- **STOP BITS (1, 2)**

Each word must be separated from the next one with a special bit called "stop bit". This parameter specifies the length of the stop bit (1=single, 2=double).

- **XON/XOFF CONTROL (ON, OFF)**

This parameter determines whether or not to allow flow control by the X parameter. If this control is allowed, an XOFF code (13hex) will be transmitted by the receiving machine when the free area in the reception buffer is less than 25%. As the data is processed and removed from the buffer, the free area increases. When the free area becomes greater than 75%, the receiving machine sends an XON code (11hex) to make the other machine resume data transmission. When the transmitting machine receives an XOFF code, it enters a state in which it can transmit only XON/XOFF codes. This state is terminated upon reception of an XON code. This is valid only during data transmission other than file transfer using XMODEM protocol. Regardless of the flow control method, data transmission is possible only when the control signal lines DSR and CTS are active.

- **SIGNAL LINE CONTROL (NONE, DTR)**

This parameter determines whether or not to allow flow control by the control line DTR. The DTR line will allow transmission only when active.


- **LOCAL ECHO (ON, OFF)**




When local echo is on, transmitted data is displayed on your screen.

- **AUTO LINEFEED (ON, OFF)**

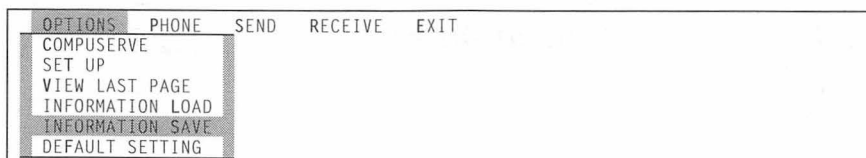
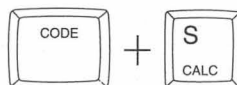
This parameter determines the effect of a received carriage return code (0Dhex) on the cursor. If you select ON, a carriage return will automatically add a line feed. Set this to OFF if the received data is displayed with double line spacing. Set it to ON if the received data is displayed on the same line, overwriting the previous message.

- **AUTO LINEFEED SEND (ON, OFF)**

This parameter determines what is transmitted when you press the  key.

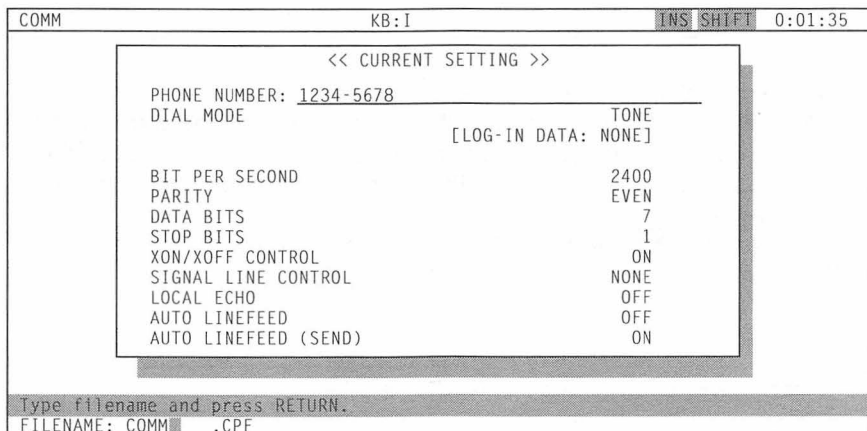
Pressed key	AUTO LINEFEED ON	AUTO LINEFEED OFF
	CR, LF	CR
 + 	CR	CR, LF

Saving the Communication File on Diskette



The settings of the SET UP screen, the dial command of the DIAL screen, and the ID/password data are automatically stored in the memory when you exit the COMMUNICATION mode. Since only one set of such data can be kept in memory, you will find it more convenient to save these settings on diskette.

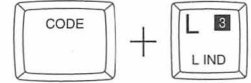
1. Insert a diskette into the drive.
2. From the COMMUNICATION screen, press **MENU** to display the function menu.
3. Use **←** and **→** to select OPTIONS and press **RETURN** or **↓** to display the submenu.
4. Use **↑** and **↓** to select INFORMATION SAVE and press **RETURN**. You can also select INFORMATION SAVE after pressing **MENU** while setting up or dialing. A screen similar to the following appears and displays your current parameter settings.



- **Short cut:** Instead of (2), (3) and (4), press **CODE** + **S**.
- You can also save the setting from the DIAL or SET UP screens. Press **MENU**, select INFORMATION SAVE and press **RETURN**, or press **CODE** + **S**. The above screen will appear.

5. Type a file name and press **RETURN** to save the information displayed on the screen (settings + dial command + ID/password), or press **CANCEL** to exit. The extension .CPF is automatically added to the file name. After saving the settings, the system returns to the screen from which you started the operation.

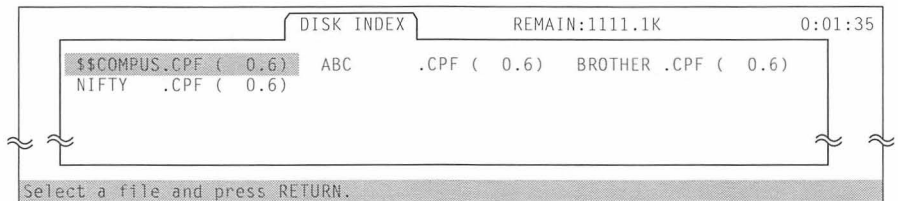
Loading a Communication File from Diskette



1. Insert the diskette containing the information that you want to load.
2. From the COMMUNICATION screen, SET UP screen, or DIAL screen, press **MENU** to display the function menu.
3. Use **←** and **→** to select **OPTIONS** and press **RETURN** or **↓** to display the submenu.
4. Use **↑** and **↓** to select **INFORMATION LOAD** and press **RETURN**. The current settings are displayed and this message appears:

Erase current setting and load file from disk? Press RETURN(yes) or CANCEL(no).

- **Short cut:** Instead of (1) ~ (4), press **CODE** + **L**.
5. Press **RETURN** if you want to load the file and overwrite the current settings, or press **CANCEL** to exit if you do not want to overwrite the current settings. If you press **CANCEL**, you can save the current settings and restart loading from diskette.
 6. If you pressed **RETURN**, the DISK INDEX screen appears and displays only Communication files (extension .CPF).

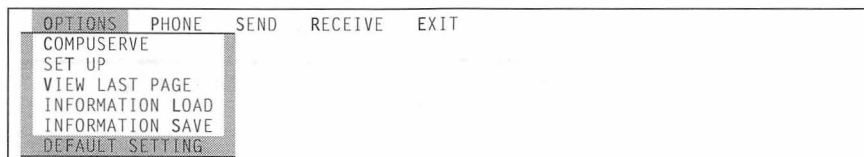


- Use the cursor keys to select a Communication file and press **RETURN**. The selected file will be loaded. If the file contains a phone number, this message will appear:

OK to begin auto dial/log-in? Press RETURN(yes) or CANCEL(no).

- Press **RETURN** to dial, or press **CANCEL** to return to the COMMUNICATION screen.

Resetting all Parameters to their Default Setting



After trying different settings for the communication parameters, you might decide to return all parameters to their default value. Instead of resetting all individual parameters according to the table on page 195, proceed as follows:

- From the COMMUNICATION screen, press **MENU** to display the function menu.
- Use **←** and **→** to select OPTIONS and press **RETURN** or **↓** to display the submenu.
- Use **↑** and **↓** to select DEFAULT SETTING and press **RETURN**. You can also select DEFAULT SETTING after pressing **MENU** while setting up or dialing. This message will appear:

Change current setting to default setting? Press RETURN(yes) or CANCEL(no).

- You can also start this operation from the DIAL or SET UP screens. Press **MENU**, select DEFAULT SETTING and press **RETURN**. The above message will appear.*
- Press **RETURN** to reset the parameters, or **CANCEL** to exit. After resetting the parameters, the system returns to the screen from which you started the operation.
- The parameters are reset to the underlined values shown on page 195. The dial command and auto log in data are emptied, and the file name is returned to "COMM".*

Using CompuServe

This function is available only in countries where CompuServe provides their service. The COMPUSERVE option on the OPTIONS submenu allows you to quickly and easily create a Communication file for CompuServe.

The file has the same structure as a normal Communication file that you create using SET UP.

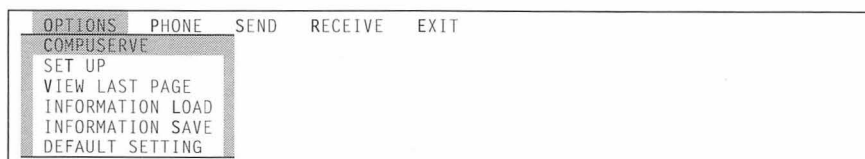
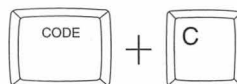
When you set up a Communication file using the COMPUSERVE selection on the menu, the file is stored into the memory under the file name \$\$COMPUS.CPF.

The advantage of using the COMPUSERVE selection on the menu instead of SET UP is that COMPUSERVE automatically sets most communication parameters to the correct value for accessing CompuServe. These parameters that are automatically set up are:

Default settings for the \$\$COMPUS.CPF

Parameter	Default setting
PARITY	EVEN
DATA BITS	7
STOP BITS	1
XON/XOFF CONTROL	ON
SIGNAL LINE CONTROL	NONE
LOCAL ECHO	OFF
AUTO LINEFEED	OFF
AUTO LINEFEED (SEND)	ON

Creating a \$\$COMPUS.CPF file



1. Press **MENU** to display the function menu.
2. Use **←** and **→** to select OPTIONS and press **RETURN** or **↓**. The submenu appears.
3. Use **↑** and **↓** to select COMPUSERVE and press **RETURN**. The COMPUSERVE LOGIN FILE screen appears:

XXXXXXXX
KB:X
SHIFT

<< COMPUSEVER LOGIN FILE >>

PHONE NUMBER:
 DIAL MODE
 BIT PER SECOND
 USER ID:
 PASSWORD:

TONE
 2400

Type telephone number and press RETURN.
 Press GOTO to display ADDRESSBOOK.

- **Short cut:** Instead of (1), (2) and (3), press **CODE** + **C**.
- 4. Use **↑** and **↓** to move the cursor to the desired item.
- 5. For PHONE NUMBER, USER ID, and PASSWORD, type the data.
 When entering the telephone number, enter your local direct access CompuServe number. Contact CompuServe to find your local access number or refer to the CompuServe booklet. You may also use the CompuServe 1-800-848-4480 number. (Do not enter dashes or parentheses in the number.) If the number is a Sprintnet or Tymenet access number, refer to the note on the following page.
 For DIAL MODE and BIT PER SECOND, use **(SPACE BAR)** to select the desired setting. BIT PER SECOND will cycle through the following values: 300, 600, 1200, 2400, 4800, 9600. If you are using a Brother MO-700 DATA MODEM, select 2400. After setting a parameter, press **↑** or **↓** to enter it and move to the previous or next item.
 When you press **RETURN** while the cursor is on PASSWORD, this message appears:

OK to begin auto dial/auto log-in? Press RETURN(yes) or CANCEL(no).

- 6. Press **RETURN** to log in, or **CANCEL** to return to the COMMUNICATION screen.
- You can save the CompuServe Communication file on diskette, and load it from a diskette the same way as for any other Communication file. The only difference is that, when you save the file, you will not be asked to enter a file name. The file will automatically be saved under the file name **\$\$COMPUS.CPF**.
- When you select **COMPUSEVER** from the menu, the **COMPUSEVER LOGIN FILE** screen will display the setting of the current Communication file if the file is a CompuServe file (its name is **\$\$COMPUS.CPF**). If the name of the Communication file in memory is **COMM.CPF**, you will be asked whether you want to overwrite the current Communication file:

Change current settings? Press RETURN(yes) or CANCEL(no).

Press **RETURN** to confirm, or **CANCEL** to return to the **COMMUNICATION** screen.

7. After log-in procedures, the top screen of CompuServe appears.
 - If you want to view CompuServe information only, follow the operation procedure which is displayed on the screen by CompuServe. When the screen is full, the information on the top of the screen scrolls off and is stored in a buffer. The VIEW LAST PAGE option of the function menu allows you to quickly recall the scrolled information on the screen. For details, see "Scrolling the Display" on page 209.
 - If you find that the text scrolls off your screen too quickly, you may change the AUTO LINEFEED selection under SET UP to OFF.
 - If you want to download a text from CompuServe, select RECEIVE from the menu, and then select RECEIVE ASCII FILE NO PROTOCOL from the submenu. For details, see "Receiving a File" on page 211.
 - If you want to send a file to CompuServe, select SEND from the menu, and then select SEND WP TEXT (W/ASCII) NO PROTOCOL from the submenu. For details, see "Sending a File" on page 210.

Tymenet and Sprintnet Access

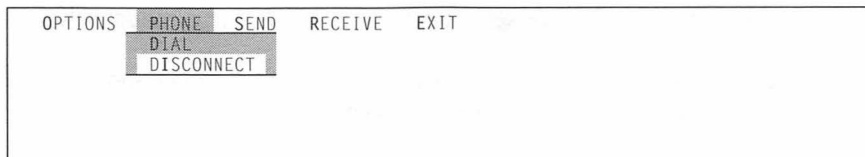
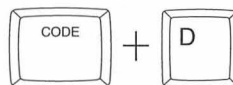
If CompuServe advises you to use either of these access numbers, be sure to follow the directions given by CompuServe.

- For Tymenet you must type the letter "A" at the "connect 2400" prompt and "CPS" at the "Please log-in" prompt.
- For Sprintnet you must type the "@" symbol at the "connect 2400" prompt. At the "terminal=" prompt, type "DI". At the "@" prompt, type "C 202202". If you receive a "HOST" prompt, type "CIS".

Connecting through the Phone Line

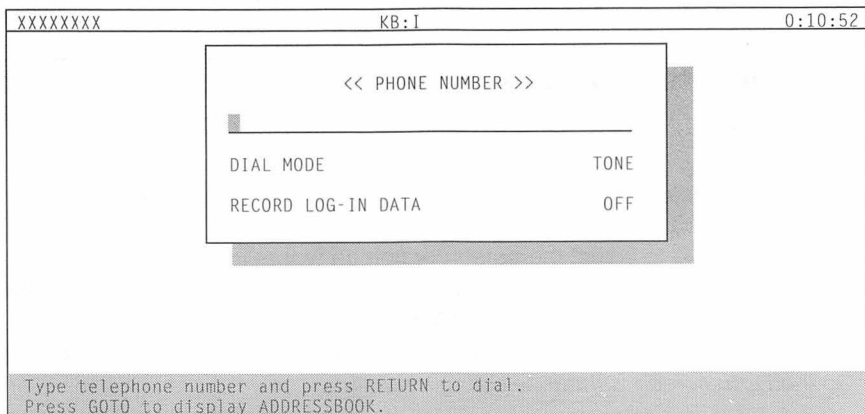
To connect through the phone line, you first have to dial the phone number. When the connection is established, you have to log in the computer that is connected through the phone line.

Dialing













A dial command includes a phone number and a dial mode specification (TONE or PULSE).

- If the current Communication file contains a phone number and a dial mode, these are automatically displayed when you enter in dial mode. If you modify the phone number or the dial mode, the new data will overwrite the old one in the Communication file.*
- Press **MENU** to display the function menu.
 - Use **←** and **→** to select **PHONE** and press **RETURN** or **↓**. The submenu appears.
 - Use **↑** and **↓** to select **DIAL** and press **RETURN**. The DIAL screen will appear:






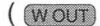








- Short cut:** Instead of (1), (2) and (3), press **CODE** + **D**.
- Enter a phone number if no phone number is displayed, or if you want to change the phone number that is displayed. You can either type the phone number directly or get it from the Addressbook. See below for details.

5. If necessary, set the dial mode (TONE or PULSE). Use  or  to move the cursor to the DIAL MODE setup area, then press  to select TONE or PULSE.
 - *The dial mode you need to select depends on your telephone. Some telephones use the TONE mode, other use the PULSE mode. If you do not know whether your phone uses TONE or PULSE, try either one, and restart with the other option if the first one did not work.*
6. If you want to record the log-in sequence for auto log-in next time, use  or  to move the cursor to the RECORD LOG-IN DATA setup area, then press  to select ON. For details, see "Auto Log-in" on page 205.
 - Press  to return to the Terminal mode without dialing.
7. Press  to dial, or  to return to the Terminal mode without dialing.
If you press , the machine will automatically dial the phone number. During automatic dialing, this message will be displayed:

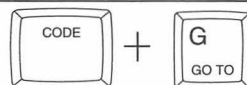
Sending dial command string. Press CANCEL to abort.








- While this message is displayed, press  to stop dialing.

Direct Typing of the Phone Number

1. Type the phone number (you may insert hyphens between the different parts of the number to make it easy to read).
2. To edit the phone number, use ,  +  (), and  +  () to delete,  +  () to switch the insert mode on/off, and ,  to move the cursor on the entry field.

Selecting the Phone Number from the Addressbook



1. Instead of typing the phone number, press  +  () on the DIAL screen. The current Addressbook file appears.
2. Use  and  to select the person or company that you want to call and press . The phone number appears on the entry field of the PHONE NUMBER and you may edit it as explained above.
 - Pressing  when the Addressbook file is displayed returns the system to the DIAL screen without selecting a number.
 - The selection of a phone number using the Addressbook file is possible only if the file contains a column whose label starts with the string "TELEPHONE" (all capitals). For example, "TELEPHONE NO" is valid while "Telephone" or "telephone" are not. If a valid label is not found, this message will appear:

ADDRESSBOOK has no telephone number column.

If the Addressbook file is empty, this message will appear:

ADDRESSBOOK has no data

Auto Log-in

When the phone line is connected, your machine must identify itself to the computer at the other end of the line by sending a log-in command.

A log-in command includes a user ID and a password. The log-in command can be stored in the Communication file and executed automatically.

1. Select PHONE from the function menu, then select DIAL from the submenu.

XXXXXXXX	KB:I	0:10:52
----------	------	---------

<< PHONE NUMBER >>

DIAL MODE	TONE
RECORD LOG-IN DATA	OFF

Type telephone number and press RETURN to dial.
Press GOTO to display ADDRESSBOOK.

2. Enter the phone number and set the DIAL MODE as explained on pages 203 and next.
3. Move the cursor to RECORD LOG-IN DATA and use **(SPACE BAR)** to select ON or OFF.
 - If the current Communication file is the CompuServe file, RECORD LOG-IN DATA cannot be turned ON.
4. Press **(RETURN)**.

What happens next depends on the above selection (ON or OFF).

When you select RECORD LOG-IN DATA ON

This display will appear:

XXXXXXXX	KB:I	0:10:52
----------	------	---------

ATDT0528215720
CONNECT 2400

USER ID :
PASSWORD :

Recording log in data.... press CODE+R to stop recording log in data.

1. Type your user ID and password.
 2. Press **CODE** + **R** to store the log-in data and log in. You are now in Terminal mode and you can start communicating.
- *If your Communication file already contained a log-in command, the new log-in command replaces the old one. The log-in data cannot be edited in the same way as other data, so you have to use the above procedure whenever you want to change the log-in data.*
 - Press **CANCEL** instead of **CODE** + **R** to log in without storing the log-in data.
 - *If the memory becomes full while you are typing the log-in data, this message appears:*

Memory full. Press CODE+R to stop and record log in data.

*Press **CODE** + **R** to store the data that has been entered so far and move to the Terminal mode, or press **CANCEL** to move to the Terminal mode without storing the data.*

When you select RECORD LOG-IN DATA OFF

If your Communication file already contains log-in data, the machine will not ask you to enter the log-in data. Instead, the stored log-in command will be automatically executed and this message will appear:

Executing auto log-in. Press CANCEL to abort.

- *While the message is displayed, the machine will automatically send the log-in data. Press **CANCEL** to escape.*

If your Communication file does not contain log-in data, you will be asked to enter your user ID and your password. The data will not be stored into the Communication file.

Disconnecting



To disconnect without exiting the Communication mode, proceed as follows:

1. Press **MENU** to display the function menu.
2. Use **←** and **→** to select **PHONE** and press **RETURN** or **↓**. The submenu appears.
3. Use **↑** and **↓** to select **DISCONNECT** and press **RETURN**. This message will appear:

Disconnecting? Press RETURN(yes) or CANCEL(no).

4. Press **RETURN** to disconnect, or **CANCEL** to escape.

After disconnecting, you can dial another number.

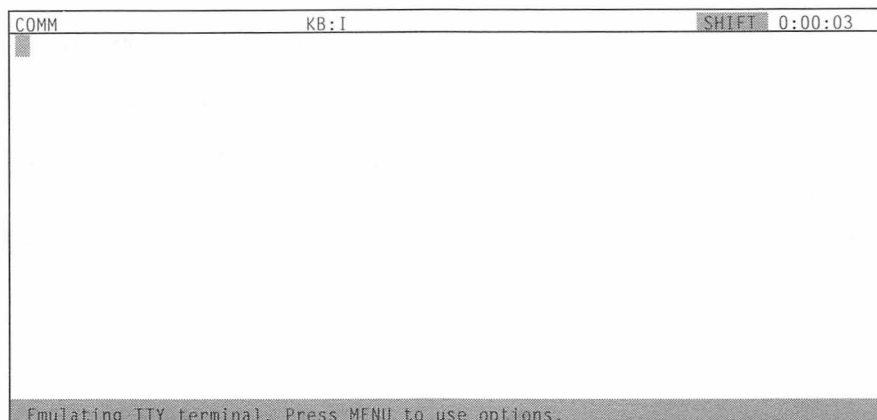
Dialing and Connection Problems

- If the prompt of the destination computer is changed every time you transmit, you cannot use the Auto log-in function. This happens, for example, when the data or time is automatically inserted in the prompt of the destination computer. In that case, you should log in manually.
- After the connection is established, **CONNECT** appears on the **COMMUNICATION** screen. If any other message appears (**NO CARRIER**, etc.), the line may be busy or you may have entered a wrong telephone number. Check the number and try dialing again. If **OK** does not appear, or if **0** (zero) appears instead, when you type **AT** and press **RETURN** in the terminal mode while the line is not connected, this means that the modem does not return the messages. Type **ATQ0V1** and press **RETURN**. Check whether **OK** appears.
- If the received data is not displayed correctly, check the settings (see "Set Up" on page 194). If the baud rate (bits per second) of your machine and the baud rate of the host machine do not match, data cannot be displayed correctly.
- When you want to terminate a communication while you are connected, return to the **MAIN MENU** (see "How to Finish?" on page 193). With some types of modems, or with some settings of the modem switches, communication cannot be interrupted that way. In that case, turn off the power of the modem.
- If an auto log-in cannot be completed successfully, this message will appear:

Error during auto log in!!

Communicating

The Terminal Mode



The main mode of the COMMUNICATION screen is used to send and receive messages. This is called the Terminal mode.

You know that the machine is in the Terminal mode when this message is displayed:

Emulating TTY terminal. Press MENU to use options.

To prepare your machine for receiving a call, proceed as follows:

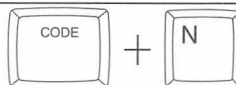
1. Make sure that the Terminal mode is displayed.
2. Type `ATS0=1` and press **RETURN**.
3. Wait until connection is established.

Sending and Receiving Messages

Once the connection is established, everything you type on the screen is transmitted to the other computer. Everything that is typed on the screen of the other computer is displayed on your screen.

If you have set LOCAL ECHO ON, every message that reaches the other computer is sent back to your machine and displayed again. This is useful when you want to make sure a message has been correctly transmitted before sending the next one.

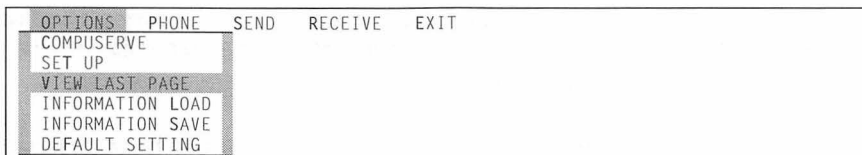
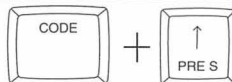
Sending Data in Hexadecimal Code



When you are communicating with another computer, you may be requested to send data in hexadecimal code. To send data in hexadecimal code:

1. From the COMMUNICATION screen, press **CODE** + **N**.
2. Enter the hexadecimal values for the characters you want to send, referring to the table on page 214.
3. Press **RETURN**. The system sends the data and returns to the COMMUNICATION screen.

Scrolling the Display



When the screen is full, the messages on the top of the screen disappear and are stored in a buffer. The capacity of the buffer is one full screen. When the buffer is full, the oldest information is automatically deleted to make room for the new data. When there is information stored in the buffer, the VIEW LAST PAGE option of the function menu allows you to quickly recall that information on the screen. Proceed as follows:

1. Press **MENU** to display the function menu.
2. Use **←** and **→** to select **OPTIONS** and press **RETURN** or **↓**. The submenu appears.
3. Use **↑** and **↓** to select **VIEW LAST PAGE** and press **RETURN**.
 - **Short cut:** Instead of (1), (2) and (3), press **CODE** + **↑** (**PRE S**).

Scrolling the screen interrupts the Terminal mode. To return to that mode, press

CANCEL.

Sending a File

OPTIONS	PHONE	SEND	RECEIVE	EXIT
		SEND WP TEXT(W/ASCII) NO PROTOCOL		
		SEND WP TEXT(W/ASCII) XMODEM		
		SEND WP TEXT(.WPT)		

OPTIONS	PHONE	SEND	RECEIVE	EXIT
		SEND WP TEXT(W/ASCII) NO PROTOCOL		
		SEND WP TEXT(W/ASCII) XMODEM		
		SEND WP TEXT(.WPT)		

OPTIONS	PHONE	SEND	RECEIVE	EXIT
		SEND WP TEXT(W/ASCII) NO PROTOCOL		
		SEND WP TEXT(W/ASCII) XMODEM		
		SEND WP TEXT(.WPT)		

- *The machine can transmit Word Processing files stored in the memory. If you want to transmit a file that is stored on a diskette, first load the file into the memory. For details, see "Transferring Files from Diskette to Memory" on page 278.*

Before sending a file, you must be connected (your machine has been dialed or you have dialed another machine, and if necessary, recorded the auto log in data). If you are sending to a personal computer or Super PowerNote and are connected directly by a NUL MODEM cable, you are automatically connected and no dialing is necessary. You must also specify that you are going to send a file. With an electronic mail box service, this is usually done by selection on an option menu. If you are communicating with a friend, just tell him that you are going to send a file (type the message and press **RETURN**). This will give him time to prepare his machine for receiving your file. Verify that both the sending and receiving units are "set-up" to use the same parameters.

1. On the COMMUNICATION screen, press **MENU** to display the function menu.
 2. Use **←** and **→** to select SEND and press **RETURN** or **↓**. The submenu appears.
 3. Use **↑** and **↓** to select SEND WP TEXT(W/ASCII) NO PROTOCOL, SEND WP TEXT (W/ASCII) XMODEM, or SEND WP TEXT(.WPT) and press **RETURN**. The MEMORY INDEX appears.
- *If you select SEND WP TEXT(W/ASCII) NO PROTOCOL or SEND WP TEXT (W/ASCII) XMODEM, your text file will be converted into a standard ASCII file. Attributes and most of the format will be removed from the data. You must select one of these options if the receiving machine is not Super PowerNote. Select NO PROTOCOL or XMODEM according to the parameter setting of the receiving system. If you want to send a WP file to a commercial communication service such as CompuServe, select NO PROTOCOL.*

- If you select SEND WP TEXT(.WPT), the format of your text file will be preserved. However, this works only if the receiving machine is another Super PowerNote. With this option, the protocol is automatically set to XMODEM.
- If there is no text file in the memory, this message will appear:

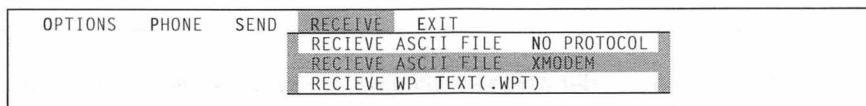
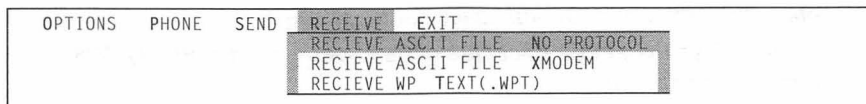
No files to send.

4. Select a file with the cursor keys and press **RETURN** to start transmission. During transmission using NO PROTOCOL, the transmitted text as well as the reception errors are echoed back as determined by the settings. The amount of data already transmitted will be displayed in Kilobytes.

During transmission using the XMODEM protocol, the receiving machine checks the data by blocks of 128 bytes. When an error occurs, the receiving machine sends a retransmission request and your machine sends the same block again. The number of transmitted bytes as well as the number of retrials are displayed on the screen.

- To cancel transmission, press **CANCEL**. When using the XMODEM protocol, transmission is also aborted if the **CANCEL** key is pressed on the receiving machine. This key is usually the Escape key on a personal computer.

Receiving a File



- A received file is stored in the machine memory. The maximum file size which can be downloaded is 32K on the condition that there is no other WP files in the memory. Make sure that you have enough free space in memory. If necessary, transfer your files onto a diskette and delete them from the memory. For details, see "Transferring Files from Memory to Diskette" on page 272 and "Deleting Files from the Memory" on page 270.

Before receiving a file, you must be connected (your machine has been dialed or you have dialed another machine, and if necessary, recorded the auto log in data). If you are receiving from a personal computer or Super PowerNote and are connected by a NUL MODEM cable, you are automatically connected and no dialing is necessary. If you are communicating with a friend, tell him that you want to receive a file (type the message and press **RETURN**). This will give him time to prepare his machine for sending a file. Verify that both the sending and receiving units are "set-up" to use the same parameters.

1. On the COMMUNICATION screen, press **MENU** to display the function menu.
2. Use **←** and **→** to select RECEIVE and press **RETURN** or **↓**. The submenu appears.
3. Use **↑** and **↓** to select RECEIVE ASCII FILE NO PROTOCOL, RECEIVE ASCII FILE XMODEM, or RECEIVE WP TEXT(.WPT) and press **RETURN**. You are asked to enter a file name.
 - *If you select RECEIVE ASCII FILE NO PROTOCOL or RECEIVE ASCII FILE XMODEM, the received ASCII file will be converted into a text file. The layout of the converted text file will be quite primitive but you are free to improve it later using the Word Processing mode. You must select one of these options if the transmitting machine is not a Super PowerNote. Select NO PROTOCOL or XMODEM according to the parameter settings of the transmitting system. If you want to download a text file from a commercial communication service such as CompuServe, select NO PROTOCOL.*
 - *If you select RECEIVE WP TEXT(.WPT), the file will be stored without conversion. The format of the transmitted file will be preserved. However, this works only if the transmitting machine is another Super PowerNote. With this option, the protocol is automatically set to XMODEM.*
 - *If there is less than three Kilobytes of free space in the memory, this message will appear:*

Not enough memory remaining.

4. Type the file name under which the received file will be stored in the memory and press **RETURN** to start receiving. You may also press **CANCEL** during file name input to cancel the operation and return to the COMMUNICATION screen.

During reception using NO PROTOCOL, the amount of data already received will be displayed in Kilobytes.

During reception using the XMODEM protocol, your machine checks the data by blocks of 128 bytes. When an error occurs, your machine sends a retransmission request and the same block is received again. The number of received bytes as well as the number of retrials are displayed on the screen.

- To cancel reception, press **CANCEL** or **CODE** + **MENU** (**FILE**), according to the message on the bottom of the screen. When using the XMODEM protocol, reception is also aborted if the **CANCEL** key is pressed on the transmitting machine.
- Pressing **CODE** + **MENU** (**FILE**) during reception of an ASCII file displays this message:

Press RETURN to close and save, CODE+D to delete.

- If the memory becomes full during reception of an ASCII file, this message will appear:

Memory full. Press RETURN to close and save, CODE+D to delete.

- In both cases, if you press **RETURN**, the portion of the file that has been received will be converted into a text file and saved under the file name that you specified. If you press **CODE** + **D**, the file will be deleted.

NOTE:

This machine is text-based and any graphic data or any binary files from a commercial communication service such as CompuServe cannot be viewed or downloaded.

Character Code Table









































































8-bit Code Table

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	NUL	DLE	SP	0	@	P	▯	p		É	á				α	≡
1	SOH	DC1	!	1	A	Q	a	q	ü		í				β	±
2	STX	DC2	"	2	B	R	b	r	é		ó				Γ	
3	ETX	DC3	#	3	C	S	c	s	â	ô	ú				π	
4	EOT	DC4	\$	4	D	T	d	t	ä	ö	ñ				Σ	ı
5	ENQ	NAK	%	5	E	U	e	u	à	ò	ñ				σ	ı
6	ACK	SYN	&	6	F	V	f	v	ã	ú					μ	÷
7	BEL	ETB	'	7	G	W	g	w	ç	ù					τ	
8	BS	CAN	(	8	H	X	h	x	ê	ÿ	ı				Φ	°
9	HT	EM	)	9	I	Y	i	y	ë	Ö					Θ	
A	LF	SUB	*	:	J	Z	j	z	è	Ü					Ω	•
B	VT	ESC	+	;	K	[	k	{	ï	ø	½				δ	√
C	FF	FS	,	<	L	\	l	|	î	£	¼				×	
D	CR	GS	-	=	M	]	m	}	ï	¥	ı				φ	²
E	SO	RS	.	>	N	^	n	~	Ä						ε	
F	SI	US	/	?	O	_	o	DEL	Å							

- Codes on grey background are ASCII controls. They can be input from the keyboard and transmitted in the terminal mode. See "Transmitting Control Codes" on page 215 for a list of input keys. Code 15HEX (NAK) transmits the character.
- Any character of the above table can be received and most of them will be displayed correctly. The only exceptions are â, Å, ÿ, í, and ú, which are displayed without diacritics. Codes without a character are displayed as spaces.
- Codes above 7FHEX cannot be transmitted, except boxed characters like é. To input such characters, use the dead keys of KB:I.

Transmitting Control Codes

The following keys can be used in the terminal mode to transmit ASCII control codes.

Keys	Code (Hexadecimal)	ASCII Control Name
 +  + 	00	NUL
 +  + 	01	SOH
 +  + 	02	STX
 +  + 	03	ETX
 +  + 	04	EOT
 +  + 	05	ENQ
 +  + 	06	ACK
 +  + 	07	BEL
 +  + 	08	BS
 +  + 	09	HT
 +  + 	0A	LF
 +  + 	0B	VT
 +  + 	0C	FF
 +  + 	0D	CR
 +  + 	0E	SO
 +  + 	0F	SI
 +  + 	10	DLE
 +  + 	11	DC1(XON)
 +  + 	12	DC2
 +  + 	13	DC3(XOFF)
 +  + 	14	DC4
 +  + 	15	NAK
 +  + 	16	SYN
 +  + 	17	ETB

Keys	Code (Hexadecimal)	ASCII Control Name
<code>CODE</code> + <code>SHIFT</code> + <code>X</code>	18	CAN
<code>CODE</code> + <code>SHIFT</code> + <code>Y</code>	19	EM
<code>CODE</code> + <code>SHIFT</code> + <code>Z</code>	1A	SUB
<code>CODE</code> + <code>SHIFT</code> + <code>1</code>	1B	ESC
<code>CODE</code> + <code>SHIFT</code> + <code>2</code>	1C	FS
<code>CODE</code> + <code>SHIFT</code> + <code>3</code>	1D	GS
<code>CODE</code> + <code>SHIFT</code> + <code>4</code>	1E	RS
<code>CODE</code> + <code>SHIFT</code> + <code>5</code>	1F	US
<code>BS</code>	08	BS
<code>TAB</code>	09	HT
<code>(SPACE BAR)</code>	20	SPACE
<code>CODE</code> + <code>BS</code>	7F	DEL
<code>RETURN</code>	AUTO LF (SEND) ON: 0D+0A	CR+LF
	AUTO LF (SEND) OFF: 0D	CR
<code>CODE</code> + <code>RETURN</code>	AUTO LF (SEND) ON: 0D	CR
	AUTO LF (SEND) OFF: 0D+0A	CR+LF

Calculator

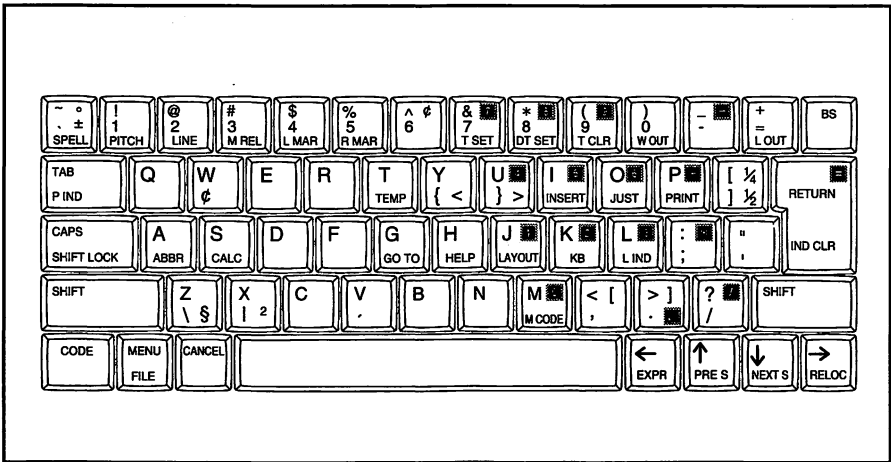
Using Your Machine like a Pocket Calculator

In the CALCULATOR mode, the screen looks like a pocket calculator and allows for elementary arithmetic. The result can be transferred to the INPUT/EDIT screen of the Word Processing mode.

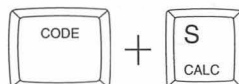
Numeric Keypad

As shown on the next illustration, a portion of the keyboard can be used as the numeric keypad of a pocket calculator. To activate the numeric keypad, press **CODE** + **Q**. Press the same key again to return to normal typing. The NUM indicator appears when the keypad function is activated.

CALCULATOR

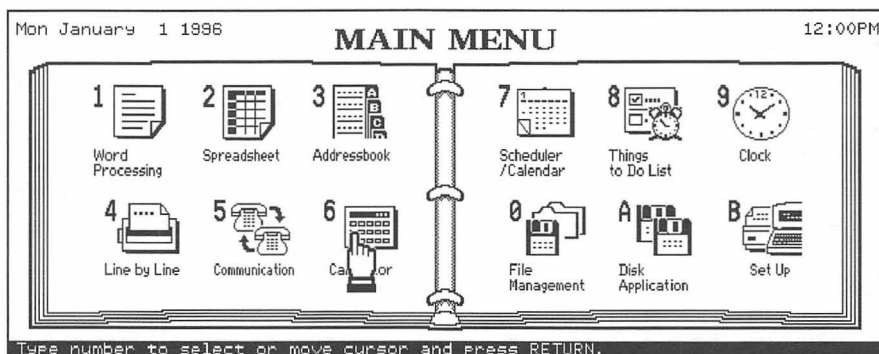


How to Start?



From the Main Menu

1. Switch the machine on to display the MAIN MENU.

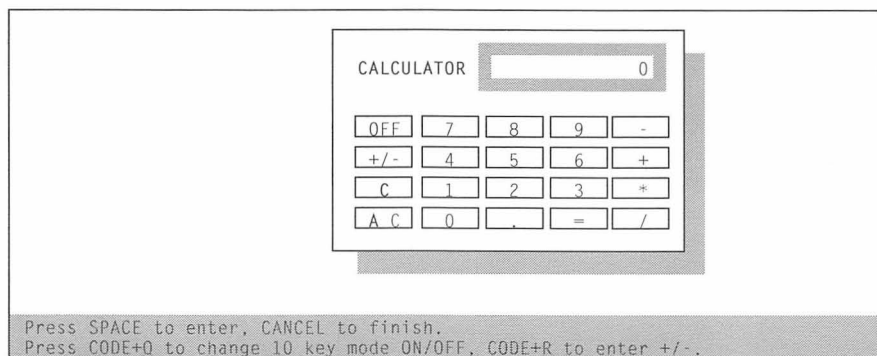


2. Type "6" or move the cursor to 6. Calculator using \leftarrow , \rightarrow , \uparrow , and \downarrow , then press **RETURN**. The CALCULATOR screen shown below appears.
- **Short cut:** Press **CODE** + **S** (**CALC**).

From the Word Processing Mode

You may display the CALCULATOR screen when you need to carry out a calculation while working on the INPUT/EDIT screen of the Word Processing mode. To do this, press **CODE** + **S** (**CALC**).

- *The CALCULATOR can be called up only during normal input. You cannot call up the CALCULATOR when the help menu is displayed, or a special function is activated.*



Calculating

1. Use the normal number keys **1** through **0** – or the number keys on the “keypad” – to type numbers. The number is displayed on the top line of the display. To correct the last digit, press **BS** and retype.
 2. Type an operator (+, for example).
 3. Type the second number.
 4. To get the result, press **=** or **RETURN**.
- *Instead of typing, use **←**, **→**, **↑**, and **↓** to move the cursor to an item on the display. Press **(SPACE BAR)** to select the item. Press **RETURN** to calculate.*

Order of Calculation

Operations are carried out in the normal order of precedence: multiplication or division first, then addition or subtraction.

Example 1: To calculate $1+2*3=7$, use **1** **+** **2** ***** **3** **=**.

Example 2: To calculate $(1+2)*3=9$, use **1** **+** **2** **=** ***** **3** **=**.

Sign

To change the sign of a number, select **+/-** or press **CODE** + **R** after entering the number.

Example: To calculate $2*(-5)=-10$, use **2** ***** **5** **+/-** **=**.

Maximum Length of Numbers and Precision

The maximum length of a number is eight digits. If you enter more digits, they will be ignored.

12345678 or 0.1234567 are accepted.

123456789 is truncated to 12345678 (9 ignored).

Since the calculator truncates all numbers to eight digits, small errors may occur.

Example: If you enter $1/3*3$, you obtain 0.9999999 instead of 1.

Storing a Constant

If you enter the same operation twice in a row, K appears on the screen and the previous result is stored in a temporary memory. That result is automatically reused if you neglect to enter a number after an operation.

Example: **5** **+** **+** (K appears and 5 is stored) **2** **=** (7 is displayed).

- *If you enter the same operation more than twice in a row, K disappears and reappears alternately.*

Clearing

C clears the last entered number or operation.

Example 1: **1 + 2 C 3** gives 4 (2 has been cleared).

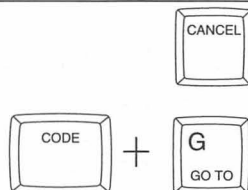
Example 2: **5 + C - 2** gives 3 (+ has been cleared).

- To clear an operation and replace it with another, you may also enter the second operation. When you enter two or more different operations in a row, only the last operation is used.

Example: **1 * + 2** gives 3.

AC clears all operations and numbers.

Turning the CALCULATOR off



To turn the CALCULATOR off, move the cursor to **OFF** and press **(SPACE BAR)**. Use **CANCEL**, or **CODE + S (CALC)**. You will be back to the MAIN MENU or to the INPUT/EDIT screen of the Word Processing mode.

If you were coming from the Word Processing mode, pressing **CODE + G (GO TO)** turns the CALCULATOR off and transfers the result of the calculation to the text.

Scheduler / Calendar

The Scheduler / Calendar Mode

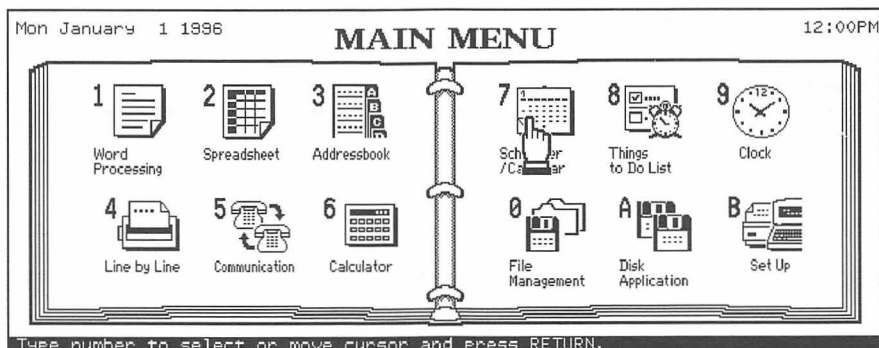
The Scheduler/Calendar is used to prepare and revise your daily schedule. You input the items of your schedule on a DAILY screen. You can give that day a title to remind you of an important event for the day. You can also set alarms in order to be automatically reminded of important events. A MONTHLY screen allows you to visualize all the titles entered in the DAILY screen and all the topics entered in TDL for one month. A CALENDAR screen displays a six-month calendar for any year between 1940 and 2099.

Before you start...

The Scheduler/Calendar mode assumes that the clock is correctly set. If this is not the case, go to the Clock mode and set the time and date correctly. See "Setting the Time" on page 259.

How to Start?

1. Switch the machine on to display the MAIN MENU.



2. Type "7" or move the cursor to 7. Scheduler/Calendar using the cursor keys and press **RETURN**. The MONTHLY screen corresponding to today's date appears. The month displayed will be correct only if you have set the date correctly in the Clock mode.

The MONTHLY Screen

SCHEDULE KB:X MEMORY:X.XK 9:22AM

[March 1996]

Sun	Mon	Tue	Wed	Thu	Fri	Sat
/	:	:	:	:	:	:
:	:	:	:	:	:	:
3/	4/	5/	6/	7/	8/	9/
:	:	:	:	:	:	:
10/	11/	12/	13/	14/	15/	16/
:	:	:	:	:	:	:
17/	18/	19/	20/	21/	22/	23/
:	:	:	:	:	:	:
24/	25/	26/	27/	28/	29/	30/
:	:	:	:	:	:	:
31/	/	/	/	/	/	/
:	:	:	:	:	:	:

Press RETURN to display the daily screen, or press FILE to finish.

The MONTHLY screen displays a one-month schedule and can be used for setting holidays, deleting a daily schedule, or switching to the CALENDAR screen. For details about operations on the MONTHLY screen, see:

- “The MONTHLY Screen” on page 233.

How to Enter a Daily Schedule?

Data input is not possible on the MONTHLY screen. To input a daily schedule, move the cursor to that day on the MONTHLY screen, and press **RETURN**. The DAILY screen appears.

The DAILY Screen

TITLE: KB:X Sat Mar 9 1996 9:22AM

6:00AM	3:00PM
:30	:30
7:00	4:00
:30	:30
8:00	5:00
:30	:30
9:00	6:00
:30	:30
10:00	7:00
:30	:30
11:00	8:00
:30	:30
12:00PM	9:00
:30	:30
1:00	10:00
:30	:30
2:00	11:00
:30	:30

Type data. Press CODE+RETURN to display monthly screen, or FILE to finish.

The DAILY screen is divided into entry fields for each half hour of the day. You can move the cursor to an entry field and enter data such as appointments, meetings, etc. On the top of the screen, you have a special TITLE entry field where you can input the indication that will appear on the MONTHLY screen for that day. You can also set alarms at selected times of the day. For details about operations on the DAILY screen, see:

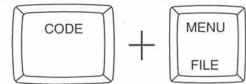
- “The DAILY Screen” on page 224.

How to Go from one Screen to Another?

As mentioned above, the Scheduler/Calendar mode has three different screens: DAILY, MONTHLY, and CALENDAR. To switch from one screen to another, use the following keys:

From MONTHLY to DAILY	RETURN (on a selected day)
From MONTHLY to CALENDAR	CODE + C
From DAILY to MONTHLY	CODE + M or = CODE + RETURN
From DAILY to CALENDAR	CODE + C
From CALENDAR to DAILY	RETURN (on a selected day)
From CALENDAR to MONTHLY	Not possible

How to Finish?



To exit the Scheduler/Calendar mode and return to the MAIN MENU, press **CODE** + **MENU** (**FILE**) from the DAILY, MONTHLY, or CALENDAR screens.

About the Scheduler/Calendar Files

You can have only one Scheduler/Calendar file in the memory. The file is automatically updated in the memory as you edit it. Each scheduler/Calendar file can hold up to 31 days of data.

If you need to work on a different Scheduler/Calendar file, save the current file on diskette. For details, see “Saving the Current File on Diskette” on page 237. The machine will ask you to enter a file name under which the file will be saved on the diskette. After saving the current file, you can clear all the data and start creating a new file.

When you retrieve a Scheduler/Calendar file from a diskette, the current file is automatically deleted and replaced with the file that you load. For details, see “Loading a Scheduler/Calendar File from the Diskette” on page 236.

The file name of the current file appears on the upper-left corner of the MONTHLY screen. A new file is automatically assigned the default file name SCHEDULE. If you are working on a file retrieved from a diskette, the file name under which you saved the file on the diskette will be displayed instead of SCHEDULE.

The DAILY Screen

TITLE: <input type="text"/>		KB:X	Sat Mar 9 1996	9:22AM
6:00AM		3:00PM		
:30		:30		
7:00		4:00		
:30		:30		
8:00		5:00		
:30		:30		
9:00		6:00		
:30		:30		
10:00		7:00		
:30		:30		
11:00		8:00		
:30		:30		
12:00PM		9:00		
:30		:30		
1:00		10:00		
:30		:30		
2:00		11:00		
:30		:30		

Type data. Press CODE+RETURN to display monthly screen, or FILE to finish.

This screen is used to enter or edit the schedule of a single day, and to set alarms.

Moving the Cursor

You can move the cursor from one entry field to the next, from one range of hours to the next, or even to the next or previous day.

↑, ↓

Moves the cursor vertically one position in the direction of the arrow. If you move the cursor to an empty field, it goes to the beginning of the field.

←, →

Moves the cursor horizontally one position in the direction of the arrow. The cursor does not move horizontally on an empty field, and it does not move from the left column to the right or vice versa.

CODE + ← (EXPR)

Moves the cursor to the beginning of the entry field.

CODE + → (RELOC)

Moves the cursor to the end of the entry field.

RETURN

Moves the cursor to the beginning of the next entry field.

CODE + Q

Selects the next range of hours in a cyclic way.

CODE + ↓ (NEXT S)

Displays the next day.

CODE + ↑ (PRES)

Displays the previous day.

Entering or Editing Data

The DAILY screen allows for scheduling a whole day. However, since only half a day can be displayed at a time, the machine divides the day into two displayable ranges of hours, from 6:00AM to 11:30PM, and from 12:00AM to 5:30PM. When you enter this screen, the former range is always displayed. To display the other range, see "Moving the Cursor" on page 224.

A total of 31 days can be scheduled before the memory becomes full. If you want to schedule more days, one of these messages appear (the first one if you have past data, and the second one if you don't):

Date full. Delete the past? Press RETURN(yes) or CANCEL(no).

Date full. Delete unnecessary daily data.

If the first message appears, press **RETURN** to delete all the scheduled days before the present day, or press **CANCEL** to exit. If the second message appears you will have to delete unnecessary daily data one by one. The present day corresponds to today's date set by the clock, not to the currently selected day. If you press **CANCEL**, you will have to delete manually some scheduled days. For details about deletion, see "Deleting Scheduled Days" on page 226.

- *The memory can become full during data input, even when you do not have more than 31 scheduled days.*

You can enter two kinds of data:

- **Title:** The data that you enter on the entry field TITLE will appear on the MONTHLY screen. This field is limited to ten characters.
- **Events:** You can enter an appointment in any entry field, for example, in front of 6:30, "Airport".

To enter data:

1. Move the cursor to the desired entry field using **↑** and **↓**.
2. Type the data.

Here is a list of the keys that you can use to enter or edit data:

Character keys

BS

CODE + **0** (**W OUT**)

CODE + **=** (**L OUT**)

CODE + **I** (**INSERT**)

CODE + **BS**

CODE + **K** (**KB**)

Dead keys

To type the data.

Deletes one character to the left.

Deletes one word.

Deletes all words on the line.

Switches the insert mode on/off.

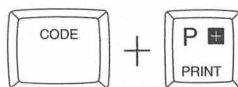
To enter superimposed characters.

To switch the keyboard.

To enter accented letters.

Using the Function Menu

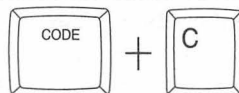
Printing the DAILY Screen



PRINT CALENDAR DELETE MONTHLY SEARCH ALARM SCREEN TO DO LIST

1. While viewing the DAILY screen, press **MENU** to display the function menu.
2. Use **←** and **→** to select PRINT and press **RETURN** to start printing.
 - **Short cut:** Instead of (1) and (2), press **CODE** + **P** (**PRINT**).
3. During printing, press **CANCEL** to stop printing.
 - On paper, the alarm symbol “♪” is replace with a “!” symbol.

Switching to the CALENDAR Screen



PRINT CALENDAR DELETE MONTHLY SEARCH ALARM SCREEN TO DO LIST

1. While viewing the DAILY screen, press **MENU** to display the function menu.
2. Use **←** and **→** to select CALENDAR and press **RETURN**. A six-month calendar containing the day of the DAILY screen appears.
 - **Short cut:** Instead of (1) and (2), press **CODE** + **C**.

Deleting Scheduled Days

PRINT CALENDAR DELETE MONTHLY SEARCH ALARM SCREEN TO DO LIST

DELETE CURSOR DATE
DELETE RECORDS UP TO TODAY'S DATE
DELETE ALL RECORDS

You may delete the data for the current day, all previous days, or all days.

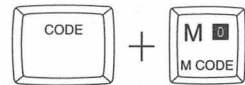
1. While viewing the DAILY screen, press **MENU** to display the function menu.
2. Use **←** and **→** to select DELETE and press **RETURN** or **↓** to display the sub-menu.
3. To delete the schedule of the current day (the day the cursor is on), select DELETE CURSOR DATE and press **RETURN**.

- **Short cut:** Instead of (1), (2) and (3), press **CODE** + **D** to delete the current day.
- 4. To delete the schedule of all days before the current one (today's date), select DELETE RECORDS UP TO TODAY'S DATE and press **RETURN**.
- 5. To delete all scheduled days, select DELETE ALL RECORDS and press **RETURN**.
- 6. Whatever your selection on the sub-menu, this message will appear:

Are you sure you want to delete? Press RETURN(yes) or CANCEL(no).

- 7. Press **RETURN** to delete or **CANCEL** to return to the DAILY screen without deleting.

Switching to the MONTHLY Screen



PRINT	CALENDAR	DELETE	MONTHLY	SEARCH	ALARM	SCREEN	TO DO LIST
-------	----------	--------	---------	--------	-------	--------	------------

- 1. While viewing the DAILY screen, press **MENU** to display the function menu.
- 2. Use **←** and **→** to select MONTHLY and press **RETURN** to display the MONTHLY screen. The cursor will be on the date of the DAILY screen.
- **Short cut:** Instead of (1) and (2), press **CODE** + **M** or **CODE** + **RETURN**.

Searching for Data

PRINT	CALENDAR	DELETE	MONTHLY	SEARCH	ALARM	SCREEN	TO DO LIST
6:00AM	1234512345			SEARCH WORD(S) FORWARD			
:30	ABCDEFGH			SEARCH WORD(S) BACKWARD			
7:00				SEARCH WORD(S) ALL			
				SEARCH ALARM SETTING(S)			
				GO TO MONTH/YEAR			

PRINT	CALENDAR	DELETE	MONTHLY	SEARCH	ALARM	SCREEN	TO DO LIST
6:00AM	1234512345			SEARCH WORD(S) FORWARD			
:30	ABCDEFGH			SEARCH WORD(S) BACKWARD			
7:00				SEARCH WORD(S) ALL			
				SEARCH ALARM SETTING(S)			
				GO TO MONTH/YEAR			

PRINT	CALENDAR	DELETE	MONTHLY	SEARCH	ALARM	SCREEN	TO DO LIST
6:00AM 1234512345				SEARCH WORD(S) FORWARD			
:30 ABCDEFGH				SEARCH WORD(S) BACKWARD			
7:00				SEARCH WORD(S) ALL			
				SEARCH ALARM SETTING(S)			
				GO TO MONTH/YEAR			

1. While viewing the DAILY screen, press **MENU** to display the function menu.
2. Use **←** and **→** to select SEARCH and press **RETURN** or **↓** to display a sub-menu.
3. Use **↑** and **↓** to select SEARCH WORD(S) FORWARD to search from the cursor position to the end of the file, SEARCH WORD(S) BACKWARD to search from the cursor position to the beginning of the file, or SEARCH WORD(S) ALL to search the whole file. Press **RETURN** to display this prompt:

Type search word(s). Press RETURN to start search.
 SEARCH:

If you wish to search for the closest day that has a schedule, do not type on the search line. Instead, press **CODE** + **PRE S** to search backward or **CODE** + **NEXT S** to search forward. When there are no scheduled days, this message will appear:

Schedule not found.

4. If you want to search for a specific word(s), type the word(s) and press **RETURN**. When an occurrence of the word(s) is found, this message appears:

Press RETURN to search again, or press CANCEL to stop search.

5. Press **RETURN** to search for the next occurrence, or **CANCEL** to stop. When the specified word(s) cannot be found, this message appears:

Word(s) not found.

Searching for Alarms

PRINT	CALENDAR	DELETE	MONTHLY	SEARCH	ALARM	SCREEN	TO DO LIST
6:00AM	1234512345			SEARCH WORD(S)	FORWARD		
:30	ABCDEFGH			SEARCH WORD(S)	BACKWARD		
7:00				SEARCH WORD(S)	ALL		
				SEARCH ALARM SETTING(S)			
				GO TO MONTH/YEAR			

1. While viewing the DAILY screen, press **MENU** to display the function menu.
2. Use **←** and **→** to select SEARCH and press **RETURN** or **↓** to display a sub-menu.
3. Use **↑** and **↓** to select SEARCH ALARM SETTING(S) and press **RETURN** to search for any alarms that are set in the file. When an alarm is found, this message appears:

Press RETURN to search again, or press CANCEL to stop search.

4. Press **RETURN** to search for the next alarm, or **CANCEL** to stop. When no alarm can be found, this message appears.

Alarm setting(s) not found.

Jumping to Another Month



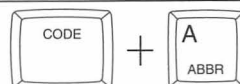
PRINT	CALENDAR	DELETE	MONTHLY	SEARCH	ALARM	SCREEN	TO DO LIST
6:00AM	1234512345			SEARCH WORD(S)	FORWARD		
:30	ABCDEFGH			SEARCH WORD(S)	BACKWARD		
7:00				SEARCH WORD(S)	ALL		
				SEARCH ALARM SETTING(S)			
				GO TO MONTH/YEAR			

1. While viewing the DAILY screen, press **MENU** to display the function menu.
2. Use **←** and **→** to select SEARCH and press **RETURN** or **↓** to display a sub-menu.
3. Use **↑** and **↓** to select GO TO MONTH/YEAR and press **RETURN** to display this prompt:

Type number. Press RETURN to display the designated month.
MONTH: ■ YEAR:

- **Short cut:** You can display this prompt from the DAILY screen by pressing **CODE** + **G** (**GO TO**).
- 4. Type the month and year. Use **→** and **←** to move the cursor from one entry field to the other. Use **BS** to delete a field.
- 5. Press **RETURN**. The first day of the designated month and year will be displayed.
- To display the next or previous day, use **CODE** + **↑** (**PRES**) and **CODE** + **↓** (**NEXT S**).

Setting an Alarm



PRINT	CALENDAR	DELETE	MONTHLY	SEARCH	ALARM	SCREEN	TO DO LIST
6:00AM				♪ 3:00P	ALARM SET		
:30				:30	ALARM CLEAR		
					ALL CLEAR		

To Set an Alarm

1. Move the cursor to the time at which you want to set an alarm and press **MENU** to display the function menu.
 2. Use **←** and **→** to select ALARM and press **RETURN** or **↓** to display the sub-menu.
 3. Use **↑** and **↓** to select ALARM SET and press **RETURN**. A ♪ symbol will appear at the left side of the time.
- **Short cut:** You can set or cancel an alarm by pressing **CODE** + **A**.
 - A total of five alarms can be set. If you try to set an additional alarm, this message will appear:

Alarm full. Delete unnecessary setting(s).

- When you enter the Scheduler mode, all obsolete alarms are automatically deleted. However, an alarm that you have set during a working session with the Scheduler can become obsolete during the same working session. You might also have mistakenly set an alarm for a past time. If this happens, the following message will appear when you try to set an additional alarm:

Alarm full. Delete The past? Press RETURN(yes) or CANCEL(no).

Press **RETURN** to delete the obsolete alarm, or **CANCEL** to keep it.

To Clear an Alarm

1. Move the cursor to the time at which you want to clear an alarm and press MENU to display the function menu.
2. Use ← and → to select ALARM and press RETURN or ↓ to display the sub-menu.
3. Use ↑ and ↓ to select ALARM CLEAR and press RETURN. The 🎵 symbol will disappear.
- **Short cut:** You can set or cancel an alarm by pressing CODE + A.

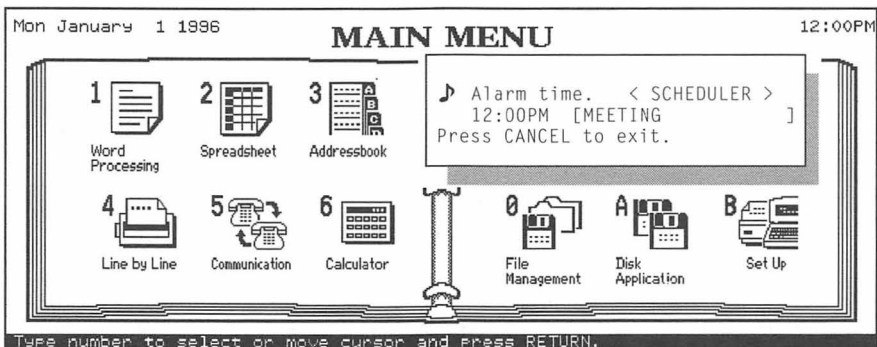
To Clear all Alarms

1. While viewing the DAILY screen, press MENU to display the function menu.
2. Use ← and → to select ALARM and press RETURN or ↓ to display the sub-menu.
3. Use ↑ and ↓ to select ALL CLEAR and press RETURN.
4. This message will appear:

Delete all alarm setting(s)? Press RETURN(yes) or CANCEL(no).

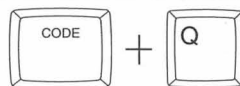
5. Press RETURN to clear all alarms, or press CANCEL to return to the DAILY screen without clearing.
- All alarms are cleared regardless of the cursor position.
- **Alarms set in CLOCK and THINGS TO DO LIST modes are not cleared.**
- An alarm is also canceled if you delete the corresponding data. All alarms are canceled when you delete all data.
- An alarm is not automatically canceled after it has been activated. Since only five alarms can be set, remember to delete any unnecessary alarm settings.

When an alarm time arrives, a beep will sound for 20 seconds and a message like this will appear:



If the machine is busy with some processing, like sorting, or disk access, when the alarm time arrives, the alarm will sound after processing is completed. If the power has been turned off, it will be automatically turned on, and the message will appear on the top of the main menu.

Changing the Range of Hours



PRINT CALENDAR DELETE MONTHLY SEARCH ALARM **SCREEN** TO DO LIST

1. While viewing the DAILY screen, press **MENU** to display the function menu.
 2. Use **←** and **→** to select **SCREEN** and press **RETURN** to display the other range of hours.
- **Short cut:** Press **CODE** + **Q** to display the ranges in a cyclic way.

Switching to the Things To Do List Mode

PRINT CALENDAR DELETE MONTHLY SEARCH ALARM SCREEN **TO DO LIST**

1. While viewing the DAILY screen, press **MENU** to display the function menu.
2. Use **←** and **→** to select **TO DO LIST** and press **RETURN**. The TO DO LIST appears and you may start editing it, just as when you select THINGS TO DO LIST from the MAIN MENU.

The MONTHLY Screen

SCHEDULE		KB:X		MEMORY:X.XK		9:22AM	
[March 1996]							
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
/	:	/	:	/	:	1/	2/
:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:
3/	4/	5/	6/	7/	8/	9/	
:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:
10/	11/	12/	13/	14/	15/	16/	
:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:
17/	18/	19/	20/	21/	22/	23/	
:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:
24/	25/	26/	27/	28/	29/	30/	
:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:
31/	/	/	/	/	/	/	
:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:
Press RETURN to display the daily screen, or press FILE to finish.							

This screen is used to have a look at a whole scheduled month. You cannot enter data on this screen. Only the titles entered on the DAILY screens are displayed here.

Moving the Cursor

You can move the cursor from one day to the next, or from one month to the next or previous one.

↑, ↓, ←, →

Moves the cursor one day in the direction of the arrow.

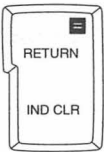
CODE + ↓ (NEXT S)

Displays the next month.

CODE + ↑ (PRE S)

Displays the previous month.

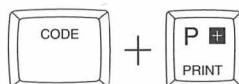
Switching to the DAILY Screen



To display a daily schedule, move the cursor to the desired day and press **RETURN**. The DAILY screen of the selected day will appear.

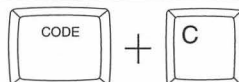
Using the Function Menu

Printing the MONTHLY Screen



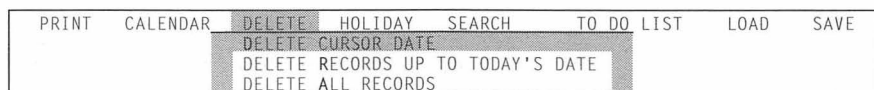
1. While viewing the MONTHLY screen, press **MENU** to display the function menu.
2. Use **←** and **→** to select PRINT and press **RETURN** to start printing.
 - **Short cut:** Instead of (1) and (2), press **CODE** + **P** (**PRINT**).
3. During printing, press **CANCEL** to stop printing.

Switching to the CALENDAR Screen



1. While viewing the MONTHLY screen, press **MENU** to display the function menu.
2. Use **←** and **→** to select CALENDAR and press **RETURN**. A six-month calendar screen appears.
 - **Short cut:** Instead of (1) and (2), press **CODE** + **C**.

Deleting Scheduled Days



You may delete the current day, all the previous days, or all days.

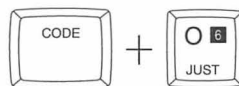
1. If you want to delete a designated day, first position the cursor on that day. If you want to delete all scheduled days or all the days up to the current day, skip this step.
2. While viewing the MONTHLY screen, press **MENU** to display the function menu.

3. Use **←** and **→** to select DELETE and press **RETURN** or **↓** to display the sub-menu.
4. To delete the schedule of the designated day (the day the cursor is on), select DELETE CURSOR DATE and press **RETURN**.
- **Short cut:** Instead of (2), (3) and (4), press **CODE** + **D** to delete the designated day.
5. To delete the schedule of all days before the current one (today's date), select DELETE RECORDS UP TO TODAY'S DATE and press **RETURN**.
6. To delete all scheduled days, select DELETE ALL RECORDS and press **RETURN**.
7. Whatever your selection on the sub-menu, this message will appear:

Are you sure you want to delete? Press RETURN(yes) or CANCEL(no).

8. Press **RETURN** to delete or **CANCEL** to return to the MONTHLY screen without deleting.

Setting Holidays



PRINT CALENDAR DELETE **HOLIDAY** SEARCH TO DO LIST LOAD SAVE

1. While viewing the MONTHLY screen, press **MENU** to display the function menu.
2. Use **←** and **→** to select HOLIDAY and press **RETURN**. This message will appear:

Press SPACE to set holiday(s), SPACE again to clear and press RETURN to exit.

- **Short cut:** Instead of (1) and (2), press **CODE** + **O**.
3. To set a single day, position the cursor on that day. To set all of a particular day, all Saturdays, for example, position the cursor on that day on the top line of the monthly calendar. When a day is set as a holiday, HOLIDAY appears on the screen.
 4. Use **(SPACE BAR)** to switch the holiday on/off.
 5. Repeat steps (4) and (5) if necessary, then press **RETURN** to return to the MONTHLY screen.

Searching

PRINT	CALENDAR	DELETE	HOLIDAY	SEARCH	TO DO LIST	LOAD	SAVE
[March 1996]				SEARCH WORD(S) FORWARD			
Sun	Mon	Tue	Wed	SEARCH WORD(S) BACKWORD			
/	/	/	/	SEARCH WORD(S) ALL			
				SEARCH ALARM SETTING(S)			
				GO TO MONTH/YEAR			

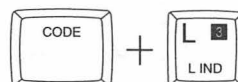
The SEARCH option of the function menu can be used in the same way as in the DAILY screen. Please refer to "Searching for Data" on page 227, "Searching for Alarms" on page 229, and "Jumping to Another Month" on page 229.

Switching to the Things To Do List Mode

PRINT	CALENDAR	DELETE	HOLIDAY	SEARCH	TO DO LIST	LOAD	SAVE
-------	----------	--------	---------	--------	------------	------	------

1. While viewing the MONTHLY screen, press **MENU** to display the function menu.
2. Use **←** and **→** to select TO DO LIST and press **RETURN**. The TO DO LIST appears and you may start editing it, just as when you select THINGS TO DO LIST from the MAIN MENU.

Loading a Scheduler/Calendar File from the Diskette



PRINT	CALENDAR	DELETE	HOLIDAY	SEARCH	TO DO LIST	LOAD	SAVE
-------	----------	--------	---------	--------	------------	------	------

1. Insert the diskette containing the file you wish to use.
 2. While viewing the MONTHLY screen, press **MENU** to display the function menu.
 3. Use **←** and **→** to select LOAD and press **RETURN** to display the DISK INDEX screen (Scheduler / Calendar files only).
- **Short cut:** Instead of (2) and (3), press **CODE** + **L**.

DISK INDEX		REMAIN:XXX.XK	11:45AM
123	.DTB (1.5)	1990	.DTB (1.5)
1992	.DTB (3.0)	1991	.DTB (3.0)

Select a file and press RETURN.

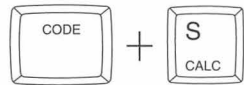
- Use the cursor keys to select the file that you want to load and press **RETURN**. If there is no Scheduler/Calendar file in the memory, the file is loaded in the memory.
- If there is a Scheduler/Calendar file in the memory, following message will appear.

Erase current file and load file from disk? Press RETURN(yes) or CANCEL(no).

- Since you can have only one Scheduler/Calendar file in the memory, loading a file from diskette will delete the current file in memory.
- Press **RETURN** to overwrite, or **CANCEL** if you do not want the current file to be deleted from the memory.

After the file is loaded, the MONTHLY screen appears.

Saving the Current File on Diskette



PRINT	CALENDAR	DELETE	HOLIDAY	SEARCH	TO DO LIST	LOAD	SAVE
-------	----------	--------	---------	--------	------------	------	------

- Insert the diskette you wish to save your Scheduler/Calendar file on.
- While viewing the MONTHLY screen, press **MENU** to display the function menu.
- Use **←** and **→** to select SAVE and press **RETURN** to display this message:

Type filename and press RETURN.
 FILENAME: SCHEDULE.DTB

- Short cut:** Instead of (2) and (3), press **CODE** + **S**.
- Type the file name (for details, see “Entering a file name” in the next section), and press **RETURN**. The extension .DTB is automatically added to the file name.

Entering a File Name

When typing a file name, please keep the following rules in mind:

1. A file name is made of up to eight characters.
2. Only the following characters can be accepted in file names: upper and lower case letters of the alphabet (A-Z and a-z), the digits (0 to 9), and the hyphen (-). All others are refused.
3. Upper and lower case letters are not distinguished. You may type a file name in lower case or upper case. Your machine automatically converts lower case letters into capitals.
4. To correct an error, use **BS** , **CODE** + **0** (**WOUT**), or **CODE** + **=** (**LOUT**) to erase the preceding letter(s), or use **←** and **→** to move the text cursor back over the name and retype.
5. If you press RETURN without changing the file name displayed in the input field, or if you enter a name that is already used by another file (check the list on the screen to avoid this situation) pressing **RETURN** displays the following prompt on the message line.

Type filename and press RETURN.
 FILENAME: XXXXXXX.DTB

Press **RETURN** to overwrite, or type a new file name and press **RETURN** to save the file under a different file name.

The CALENDAR Screen

9:22AM

July						August						September					
1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
7	8	9	10	11	12	7	8	9	10	11	12	7	8	9	10	11	12
13	14	15	16	17	18	13	14	15	16	17	18	13	14	15	16	17	18
19	20	21	22	23	24	19	20	21	22	23	24	19	20	21	22	23	24
25	26	27	28	29	30	25	26	27	28	29	30	25	26	27	28	29	30
31																	
October						November						December					
1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
7	8	9	10	11	12	7	8	9	10	11	12	7	8	9	10	11	12
13	14	15	16	17	18	13	14	15	16	17	18	13	14	15	16	17	18
19	20	21	22	23	24	19	20	21	22	23	24	19	20	21	22	23	24
25	26	27	28	29	30	25	26	27	28	29	30	25	26	27	28	29	30
31																	

Press RETURN to display the daily screen. To start printing, press PRINT.

The CALENDAR screen displays a six-month calendar. You may view the CALENDAR screen by selecting CALENDAR from the menu available on the DAILY or MONTHLY screen.

- To return to the DAILY screen, move the cursor to the desired day and press **RETURN**.
- To display the previous or next six-month calendar, use **CODE** + **↑** (**PRE S**) or **CODE** + **↓** (**NEXT S**).
- To print the calendar (12 months) for the year displayed, press **CODE** + **P** (**PRINT**). Press **CANCEL** to stop printing.

Things to Do List

The Things to Do List Mode

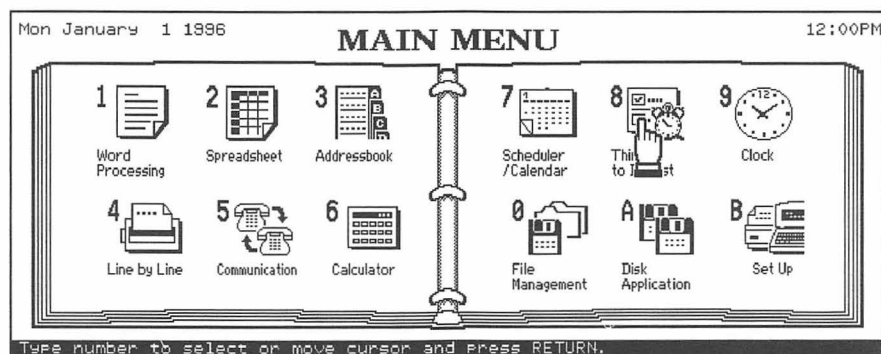
The Things to Do List mode is used to prepare and revise lists of things to do. You can edit the list, set alarms, check things already done, print and sort the list.

Before you Start...

The Things to Do List mode assumes that the clock is correctly set. If this is not the case, go to the Clock mode and set the time and date correctly. See "Setting the Time" on page 259.

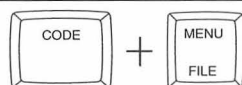
How to Start?

1. Switch the machine on to display the MAIN MENU.



2. Type "8" or move the cursor to 8. Things to Do List using the cursor keys and press **RETURN**. If your file is still empty, the DATA INPUT screen shown on page 251 appears. If the file already contains data, the THINGS TO DO LIST screen shown on page 243 appears. The THINGS TO DO LIST screen is used to display your list and perform operations like printing, record deletion, and sorting. The DATA INPUT screen is used to input or edit a single record on the list.

How to Finish?



To exit the Things to Do List mode and return to the MAIN MENU, press **CODE** + **MENU** (**FILE**) from the THINGS TO DO LIST or DATA INPUT screen.

About the Things to Do List Files

You can have only one Things to Do List file in the memory. The file is automatically updated in the memory as you edit it.

If you need to work on a different Things to Do List file, save the current file to a diskette. For details, see “Saving the Current File on Diskette” on page 250. The machine will ask you to enter a file name under which the file will be saved on the diskette. After saving the current file, you can clear all the data and start creating a new file.

When you retrieve a Things to Do List file from a diskette, the current file is automatically deleted and replaced with the file that you load. For details, see “Loading a Things to Do List File from Diskette” on page 249.

The THINGS TO DO LIST Screen

THINGS		RECORD:XX	KB:X	MEMORY:X.XK	INS	SHIFT	10:45AM
:CHECK:TOPIC		:TO DO	:DEADLINE :				
♪	✓	:Stockbroke:	For meeting this afternoon, need latest price to	:	6/20	Tue:	
:	:	:Management:	All management personnel will meet in conference	:	7/20	Thu:	
♪	:	:Call	:He would like to set up a meeting to discuss the	:	7/14	Fri:	
:	✓	:Meeting	:After meeting time is set for next week, need to	:	7/14	Fri:	
:	:	:Pick up	:I will pick up the girl and take her home.	:	8/ 1	Tue:	
:	:	:Party	:Kevin will have a party.	:	8/31	Thu:	
:	✓	:Tennis	:He will play tennis with his friends.	:	7/ 5	Wed:	
:	:	:Reunion	:A high school reunion will be held.	:	8/20	Sun:	
♪	:	:Excursion	:They will take an excursion to the seaside.	:	8/11	Fri:	
:	:	:Ski	:I have to make a reservation for my trip.	:	8/19	Sat:	
:	:	:Exam	:She will take an exam to enter the University.	:	8/19	Sat:	
:	:	:Patent	:He will apply for a patent on the cleaner.	:	8/ 1	Sat:	
:	✓	:Birthday	:I will give him a fountain pen for his birthday.	:	7/11	Tue:	
:	✓	:Shelf	:I have to fix a shelf to the wall.	:	7/ 4	Tue:	
Press RETURN to enter data, or FILE to finish. Press CODE+SPACE to check.							

The THINGS TO DO LIST screen appears first when you enter the Things to Do List mode and your file is not empty. If your file is still empty, the DATA INPUT screen appears first. See “The DATA INPUT Screen” on page 251 for details about entering data for a record and switching to the THINGS TO DO LIST screen.

The display is divided into five columns:

ALARM	A ♪ symbol at the left side of this column indicates that an alarm has been set.
CHECK	Use this column to mark things that you have already done.
TOPIC	The title of the record is displayed here.
TO DO	Displays a description of the thing to do. The actual description entered on the DATA INPUT screen can be longer than what is displayed here.
DEADLINE	Displays the deadline for each thing to do.

Moving the Cursor

Use the following keys to move the cursor:

⬆ and ⬇	Moves the cursor vertically one position in the direction of the arrow.
CODE + NEXTS and	Moves the cursor 17 lines at a time.
CODE + PRES	

Checking a Record

After doing the thing described in a record, check the record.

1. Move the cursor to the record and press **CODE** + **(SPACE BAR)**. This message appears:

Check? Press RETURN(yes) or CANCEL(no).

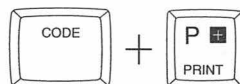
2. Press **RETURN** to check (a check mark “✓” appears) or **CANCEL** to exit. If the record was already checked, the check mark disappears. The date of the check mark is indicated in the CHECK DATE column of the DATA INPUT screen.

Editing a Record

To edit an existing record, select the record and press **RETURN**. The DATA INPUT screen appears. For details about editing, see “Entering and Editing a Record” on page 252.

Using the Function Menu for other Options

Printing the List

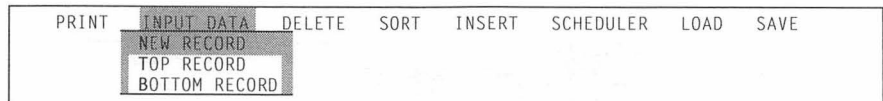
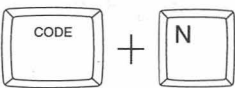


PRINT

INPUT DATA DELETE SORT INSERT SCHEDULER LOAD SAVE

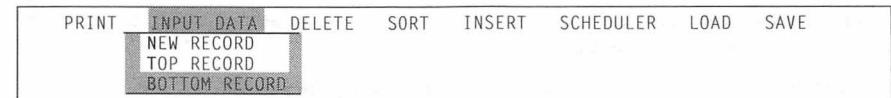
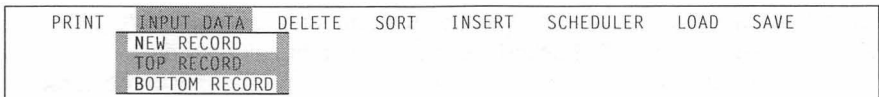
1. While viewing the THINGS TO DO LIST screen, press **MENU** to display the function menu.
2. Use **←** and **→** to select PRINT and press **RETURN** to start printing.
 - **Short cut:** Instead of (1) and (2), press **CODE** + **P** (**PRINT**).
3. During printing, press **CANCEL** to stop printing.
 - On paper, the alarm symbol “♪” is replaced with “!”, and the check mark “✓” is replaced with a “V”.

Adding a New Record



- 1. While viewing the THINGS TO DO LIST screen, press **MENU** to display the function menu.
- 2. Use **←** and **→** to select INPUT DATA and press **RETURN** or **↓** to display the submenu.
- 3. Use **↑** and **↓** to select NEW RECORD and press **RETURN**. The DATA INPUT screen appears. For details about data input, see “Entering and Editing a Record” on page 252. When you return from the DATA INPUT screen, the new record will appear at the bottom of the list.
- **Short cut:** Instead of (1), (2) and (3), press **CODE** + **N**.

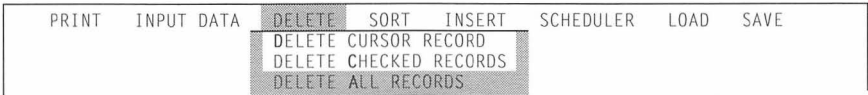
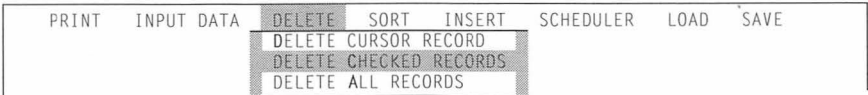
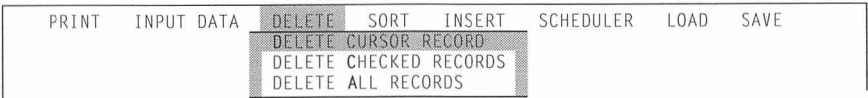
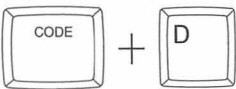
Jumping to the Top or Bottom Record



- 1. While viewing the THINGS TO DO LIST screen, press **MENU** to display the function menu.
- 2. Use **←** and **→** to select INPUT DATA and press **RETURN** or **↓** to display the submenu.
- 3. Use **↑** and **↓** to select TOP RECORD or BOTTOM RECORD and press **RETURN**. The cursor jumps to the DATA INPUT screen of the top or bottom record.

THINGS TO DO LIST

Deleting Records



There are three ways to delete records using the function menu: deleting the selected record, deleting all checked records, or deleting all records.

1. If you want to delete a single record, first select that record with the cursor.
2. Press **MENU** to display the function menu.
3. Use **←** and **→** to select DELETE and press **RETURN** or **↓** to display the submenu.

4. **To delete the selected record:** Use **↑** and **↓** to select DELETE CURSOR RECORD and press **RETURN**.

- **Short cut:** Instead of (2), (3) and (4), press **CODE** + **D**.

To delete the checked records: Use **↑** and **↓** to select DELETE CHECKED RECORDS and press **RETURN**.

To delete all records: Use **↑** and **↓** to select DELETE ALL RECORDS and press **RETURN**.

5. Whatever your selection on the submenu, one of these messages will ask you to confirm:

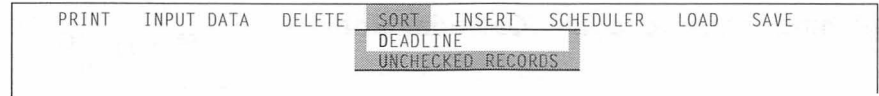
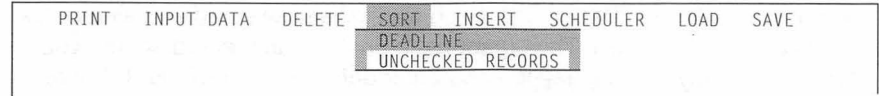
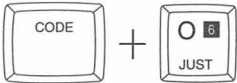
Are you sure you want to delete? Press RETURN(yes) or CANCEL(no).

6. Press **RETURN** to delete or **CANCEL** to return to the THINGS TO DO LIST screen without deleting.

The Things to Do List file can hold a maximum of 37 records. If you try to input more, one of these messages will appear:

Too many records. Delete unnecessary records.

Sorting the List

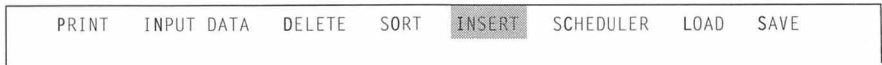
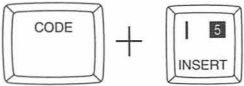


1. While viewing the THINGS TO DO LIST screen, press **MENU** to display the function menu.
2. Use **←** and **→** to select SORT and press **RETURN** or **↓** to display the submenu.
3. **To sort by increasing deadlines:** Use **↑** and **↓** to select DEADLINE and press **RETURN**. The records will be rearranged by increasing deadlines. (Records without a deadline are relocated at the bottom of the list.)
To sort checked and unchecked records separately: Use **↑** and **↓** to select UNCHECKED RECORDS and press **RETURN**. All the checked records will be sorted by increasing deadlines on the bottom of the list. The unchecked records will be sorted by increasing deadlines at the top of the list. (Records without a deadline are separately relocated at the bottom of the checked and unchecked record lists.)
- **Short cut:** Instead of (1), (2) and (3), press **CODE** + **○** to sort separately.
4. Whatever your selection on the submenu, this message will appear:

Press RETURN to sort.

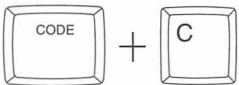
5. Press **RETURN** to sort or **CANCEL** to return to the THINGS TO DO LIST screen without sorting.

Inserting a Blank Record



1. Move the cursor to the desired insertion position.
 2. Press **MENU** to display the function menu. Use **←** and **→** to select **INSERT** and press **RETURN**. The record which was initially selected and all records below are pushed down. The cursor rests on the blank record so that you can immediately press **RETURN** and enter data on the DATA INPUT screen.
- **Short cut:** Instead of (2) and (3), press **CODE** + **I**.

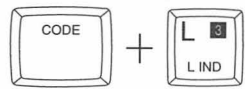
Switching to the Scheduler/Calendar Mode



1. While viewing the THINGS TO DO LIST screen, press **MENU** to display the function menu.
 2. Use **←** and **→** to select **SCHEDULER** and press **RETURN**. You are now in the SCHEDULER/CALENDAR mode.
- **Short cut:** Instead of (1) and (2), press **CODE** + **C**.

You may check your schedule and pick some events that you would like to enter in the THINGS TO DO LIST mode. The function menu of the SCHEDULER / CALENDAR allows you to switch back to the THINGS TO DO LIST mode. For details, see "Switching to the Things To Do List Mode" on page 232.

Loading a Things to Do List File from Diskette



PRINT INPUT DATA DELETE SORT INSERT SCHEDULER **LOAD** SAVE

1. Insert the diskette containing the file you wish to use.
2. While viewing the THINGS TO DO LIST screen, press **MENU** to display the function menu.
3. Use **←** and **→** to select LOAD and press **RETURN**. The DISK INDEX appears. Only the Things to Do List files (extension .TDL) are displayed.
- **Short cut:** Instead of (2) and (3), press **CODE** + **L**.

DISK INDEX REMAIN:XXXX.XK **SHIFT** 11:45AM

123	.TDL (1.5)	1990	.TDL (1.5)	1991	.TDL (3.0)
1992	.TDL (3.0)				

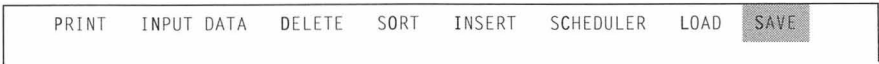
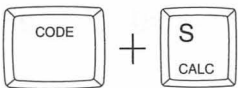
Select a file and press RETURN.

4. Select the file that you want to load and press **RETURN**. If there is no Things to do list file in the memory, the file is loaded in the memory.
5. If there is a Things to do list file in the memory, following message will appear.

Erase current file and load file from disk? Press RETURN(yes) or CANCEL(no).

- Since you can have only one Things to Do list file in the memory, loading a file from diskette will delete the current file in memory.
6. Press **RETURN** to overwrite, or **CANCEL** to return to the THINGS TO DO LIST screen without loading. You will then be able to save the current file before trying to load another from the diskette. (See next section.)

Saving the Current File on Diskette



- 1. Insert the diskette you want to save your Things to Do file on.
- 2. While viewing the THINGS TO DO LIST screen, press **MENU** to display the function menu.
- 3. Use **←** and **→** to select SAVE and press **RETURN** to display this message:

```
Type filename and press RETURN.  
FILENAME: XXXXXXX.TDL
```

- **Short cut:** Instead of (2) and (3), press **CODE** + **S**.
- 4. Type the file name (for details, see “Entering a File Name” on page 238) and press **RETURN**. The extension .TDL is automatically added to the file name.

The DATA INPUT Screen

The DATA INPUT screen is used to input or edit the contents of a single record. This screen appears first when you enter the THINGS TO DO LIST mode and the Things to Do List file is still empty so that you can start entering your first record immediately.

THINGS

RECORD: XX

KB:X MEMORY:X.XK

INS SHIFT 11:00AM

DATE: 7/12/1996

TOPIC: Management

TO DO: All management personnel will meet in conference room. Main topic will be the recent changes in our stock prices and how they affect stock options for our employees.

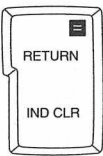
DEADLINE : 7/20/1996

ALARM TIME: ON 5:00 PM 7/19/1996

CHECK DATE: / /

Type data. Press CODE+RETURN to display view screen, or FILE to finish.

Switching from THINGS TO DO LIST to DATA INPUT Screen




















THINGS TO DO LIST

- To switch to the DATA INPUT screen in order to edit a record, proceed as follows:
1. While viewing the THINGS TO DO LIST screen, use and to move the cursor to the record that you want to edit.
 2. Press . The contents of the selected record is displayed on the DATA INPUT screen and you can start editing.

Moving the Cursor

Use the following keys to move the cursor to the entry fields:


 , 	Moves the cursor vertically one position in the direction of the arrow. If you move the cursor to an empty field, it goes to the beginning of the field.
 , 	Moves the cursor horizontally one position in the direction of the arrow. The cursor does not move horizontally on an empty field, and it does not move from the left column to the right or vice versa.
 +  ()	Moves the cursor to the beginning of the entry field.
 +  ()	Moves the cursor to the end of the entry field.
	Moves the cursor to the beginning of the next entry field.
 +  ()	Displays the next record.
 +  ()	Displays the previous record.

Entering and Editing a Record

A complete record includes the following data:

DATE	The date the TO DO item is typed
TOPIC	The title of the record
TO DO	A description of the thing to do (up to four lines of 49 characters)
DEADLINE	The date at which the thing has to be done
ALARM TIME	The time at which the alarm for this record will be activated
CHECK DATE	The date at which you checked the record (this data is generated by the machine)

To enter data:

1. Use cursor keys to move around the different entry fields.
2. Type the data.
3. To set an alarm, move the cursor to the ALARM TIME field and use  or type a value (see table below).

Alarm setting

Setting	Selection	Explanation
Switch	ON	Alarm will beep
	OFF	Alarm will not beep
		Select with (SPACE BAR).
Hour		Type the hour
Minute		Type the minutes
AM/PM	AM	This setting is available only when the hour mode is set to 12Hr on the TIME SETTING screen (Clock mode).
	PM	
		Select with (SPACE BAR).

4. After entering the data, press (CODE) + (RETURN) to switch back to the THINGS TO DO LIST screen.
- You cannot type data in the CHECK DATE field. A date will be displayed in that field if you have checked the record on the THINGS TO DO LIST screen.

Use the following keys to enter and edit data:

Character keys

To type the data.

(BS)

Deletes one character to the left.

(CODE) + (0) (W OUT)

Deletes one word on the TOPIC and TO DO fields.

(CODE) + (=) (L OUT)

Deletes an entry field on the TOPIC and TO DO fields.

(CODE) + (I) (INSERT)

Switches the insert mode on/off.

(CODE) + (BS)

To enter superimposed characters.

(CODE) + (K) (KB)

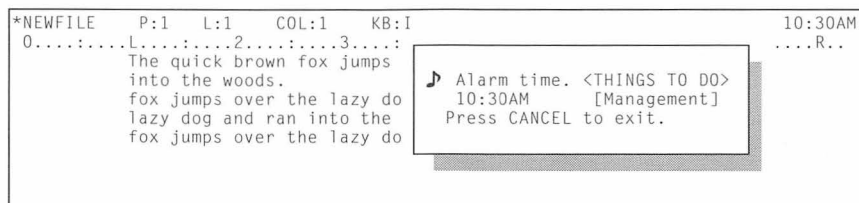
To switch the keyboard.

Dead keys

To enter accented letters.

About the Alarm

When the time of an alarm arrives, this message appears:



If the machine is busy with some processing, like sorting, or disk access, when the alarm time arrives, the alarm will sound after processing is complete. If the power is off when an alarm time arrives, it is automatically turned on, and the above message appears on top of the MAIN MENU.

The alarm will sound for 20 seconds if you don't interrupt it by pressing **CANCEL**. Each time you enter the Things to Do List mode, alarms set for past times are automatically canceled.

You can set a maximum of five alarms. If you try to set more, one of the following messages appears and you will have to delete some alarms before you can set a new one. You can do this on the DATA INPUT screen as explained in the previous section. You can also remove an alarm by deleting records with an alarm on the THINGS TO DO LIST screen (all alarms are canceled if you delete all records).

Alarm full. Delete the past? Press RETURN(yes) or CANCEL(no).

This message appears when you have alarms set for past times. Press **RETURN** to delete all alarms set for past times.

Alarm full. Delete unnecessary setting(s).

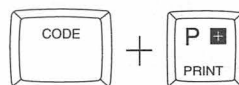
This message appears when all current alarms are set for future time. Turn off unnecessary alarms.

Alarm already set at this time. Select different time.

This message appears when you try to set an alarm at the time of another alarm. Set the alarm at a different time.

Using the Function Menu for other Options

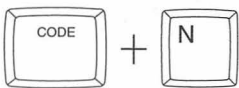
Printing a Record



PRINT INPUT DATA SCHEDULER

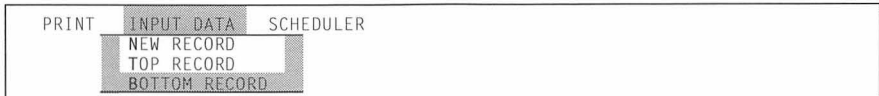
1. While viewing the DATA INPUT screen, press **MENU** to display the function menu.
2. Use **←** and **→** to select PRINT and press **RETURN** to start printing.
 - **Short cut:** Instead of (1) and (2), press **CODE** + **P** (**PRINT**).
3. During printing, press **CANCEL** to stop printing.

Adding a New Record



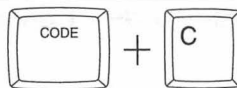
- 1. While viewing the DATA INPUT screen, press **MENU** to display the function menu.
- 2. Use **←** and **→** to select INPUT DATA and press **RETURN** or **↓** to display the submenu.
- 3. Use **↑** and **↓** to select NEW RECORD and press **RETURN**. You can start entering data for the new record. When you return to the THINGS TO DO LIST screen, the new record will appear at the bottom of the list.
- **Short cut:** Instead of (1), (2) and (3), press **CODE** + **N**.

Jumping to the Top or Bottom Record



- 1. While viewing the DATA INPUT screen, press **MENU** to display the function menu.
- 2. Use **←** and **→** to select INPUT DATA and press **RETURN** or **↓** to display the submenu.
- 3. **↑** and **↓** to select TOP RECORD or BOTTOM RECORD and press **RETURN**. The top or bottom record appears on the DATA INPUT screen.

Switching to the Scheduler/Calendar Mode



PRINT INPUT DATA SCHEDULER

1. While viewing the DATA INPUT screen, press **MENU** to display the function menu.
 2. Use **←** and **→** to select SCHEDULER and press **RETURN**. You are now in the SCHEDULER/CALENDAR mode.
- **Short cut:** Instead of (1) and (2), press **CODE** + **C**.

You may check your schedule and pick some events that you would like to enter in the THINGS TO DO LIST mode. The function menu of the SCHEDULER / CALENDAR allows you to switch back to the THINGS TO DO LIST mode. For details, see "Switching to the Things To Do List Mode" on page 232.

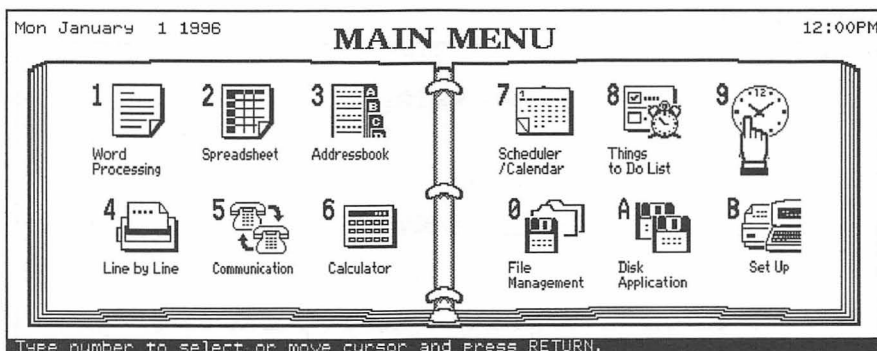
Clock






The Time Clock and the World Clock

This machine is equipped with an internal time clock featuring an alarm. The CLOCK screen or the WORLD TIME screen shown on next page can be permanently displayed when the machine is not in use. The local time is also displayed on the upper-right corner of some screens, like the MAIN MENU.

Turning the CLOCK ON

1. Switch the machine on to display the MAIN MENU.



2. Type "9" or move the cursor to 9. Clock using , , , and , then press . The CLOCK screen appears.

 - The CLOCK screen will appear the first time you activate the Clock mode from the MAIN MENU. In the Clock mode, you can choose to display either the CLOCK screen or the WORLD TIME screen. The selected screen will appear the next time you activate CLOCK from the MAIN MENU.

The CLOCK Screen

EXIT

TIME SETTING

ALARM SETTING

WORLD TIME

Mon January 1 1996

<< New York City, NY >>

2:52

AM

10

ALARM TIME

1. 10:00AM

2. 11:00AM

3. 3:00PM

Select from menu and press RETURN.

The WORLD TIME Screen

EXIT

TIME SETTING

CITY SET

CLOCK DISPLAY

Mon Jan 1

6:20 PM

Los Angeles, CA

Mon Jan 1

9:20 PM

New York City, NY

<< WORLD TIME >>

Tue Jan 2

12:20 PM

Sydney

Tue Jan 2

2:20 AM

London

Tue Jan 2

10:20 AM

Hong Kong

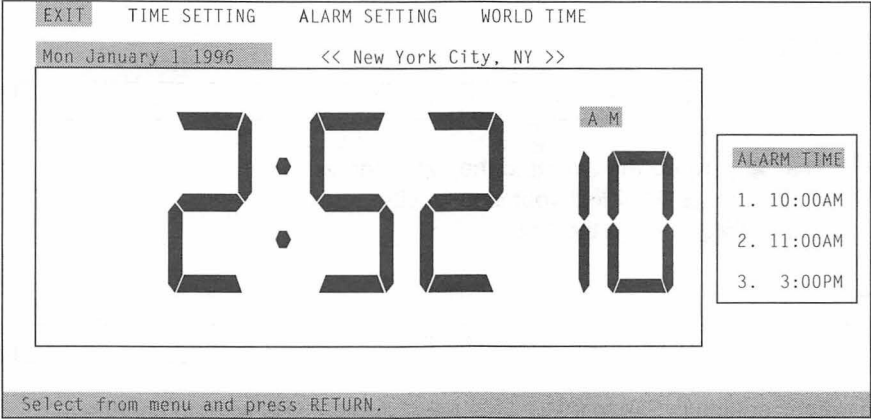
Tue Jan 2

11:20 AM

Tokyo

Select from menu and press RETURN.

The CLOCK Screen



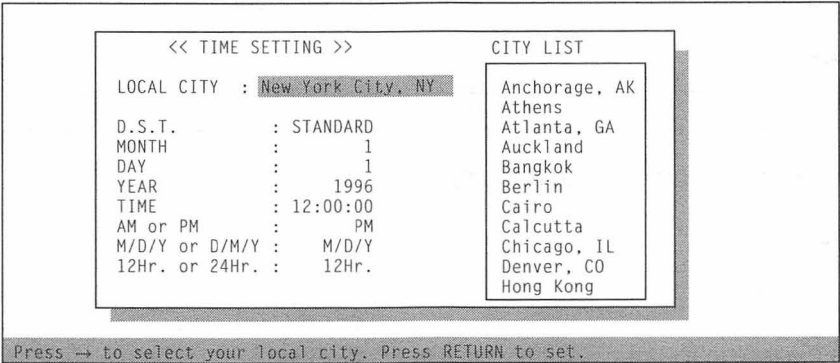
Returning to the Main Menu





To return to the MAIN MENU from the CLOCK screen, use **←** and **→** to select EXIT and press **RETURN**.

- **Short cut:** Press **CANCEL** or **CODE** + **MENU** (**FILE**).


Setting the Time





1. Use **←** and **→** to select TIME SETTING and press **RETURN**. The TIME SETTING screen appears.



2. Use  and  to move the cursor to an item that you wish to set. The message at the bottom of the screen will tell you how to change the setting.
3. After setting, press  to confirm your new settings and return to the CLOCK screen, or press  to return to the CLOCK screen without storing the new settings.

LOCAL CITY

Press  to select your local city. Press RETURN to set.

1. Press  to move the cursor to the top of the list.
2. Use , and  to select your closest city.
3. Press  to set the city.

D.S.T.

Press SPACE to change setting. Press RETURN to set time.

The default setting is STANDARD. Use  if you want to change it.

- *STANDARD means no daylight saving time. SUMMER means that one hour is added to the standard time.*

MONTH

Type number. Press RETURN to set time.

Type a number between 1 to 12 to set the month.

DAY

Type number. Press RETURN to set time.

Type a number between 1 to 31 to set the day of the month.

YEAR

Type number. Press RETURN to set time.

Type a number for the year (e.g. 1996).

TIME

Type number. Press RETURN to set time.

Type the time in the format hh:mm:ss. If the last setting is 12Hr., you should type 1:00:00 for 13:00:00. If the last setting is 24Hr., you should type 13:00:00.

AM or PM

Press SPACE to change setting. Press RETURN to set time.

Press (SPACE BAR) to toggle between AM and PM. this setting is available only when the last setting is 12Hr.

M/D/Y or D/M/Y

Press SPACE to change setting. Press RETURN to set time.

Press (SPACE BAR) to toggle between M/D/Y and D/M/Y. This will affect the way the date is displayed and inserted in your documents.

12Hr. or 24Hr.

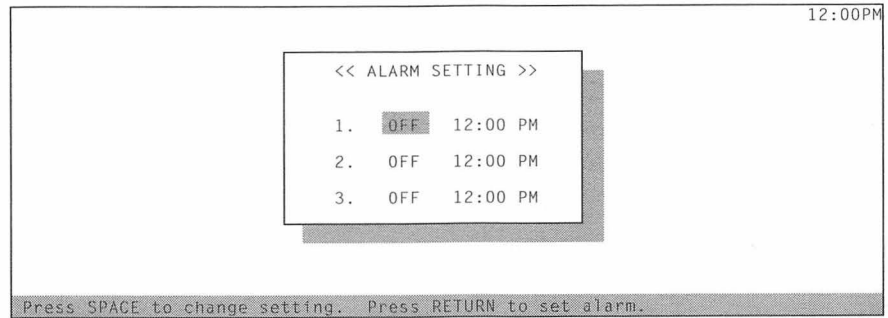
Press SPACE to change setting. Press RETURN to set time.

Press (SPACE BAR) to toggle between 12Hr. and 24Hr. This will affect the way the time is displayed and inserted in your documents.

Setting Alarms

You can set up a maximum of three daily alarms. In contrast with the alarms of the Scheduler / Calendar and Things to Do List modes, which are set to sound only once, the alarms that you set up here will sound every day at the same time.

1. While viewing the CLOCK screen, use ← and → to select ALARM SETTING and press (RETURN). The ALARM SETTING screen appears.






2. Use ↑ and ↓ to move the cursor to an item that you wish to set.
 3. To switch the selected alarm on/off, press (SPACE BAR). To change the time, retype it.
 4. When all items are set, press (RETURN) to display the CLOCK screen. If the alarm is ON, the machine will beep every day at the set time.
- Press (CANCEL) to stop the beep.

- *Alarms can also be set in the Scheduler / Calendar and Things to Do List modes. In each mode, only one alarm can be set at a specific time. However, the machine accepts more than one alarm setting for a specific time if these settings are made in different modes. You can, for example, set an alarm in the Clock and Scheduler / Calendar mode at the same time. When the time of these alarms arrives, only one will be activated according to the following order of precedence:*

Things to Do List > Scheduler / Calendar > Clock

Displaying the WORLD TIME Screen

1. While viewing the CLOCK screen, use  and  to select WORLD TIME and press . The WORLD TIME screen appears.

The WORLD TIME Screen

EXIT

TIME SETTING

CITY SET

CLOCK DISPLAY

Mon Jan 1
6:20 PM

Mon Jan 1
9:20 PM

Tue Jan 2
12:20 PM

Los Angeles, CA

<< WORLD TIME >>

Sydney

Tue Jan 2
2:20 AM

Tue Jan 2
10:20 AM

Tue Jan 2
11:20 AM

London

Hong Kong

Tokyo

Select from menu and press RETURN.

Returning to the Main Menu

1. Press **MENU** to display the function menu.
2. Use **←** and **→** to select EXIT and press **RETURN**.
 - **Short cut:** Press **CANCEL** or **CODE** + **MENU** (**FILE**).

Setting the Time

1. Press **MENU** to display the function menu.
2. Use **←** and **→** to select TIME SETTING and press **RETURN**. The TIME SETTING screen appears.

<< TIME SETTING >>

CITY LIST

LOCAL CITY : New York City, NY

D.S.T. : STANDARD

MONTH : 1

DAY : 1

YEAR : 1996

TIME : 12:00:00

AM or PM : PM

M/D/Y or D/M/Y : M/D/Y

12Hr. or 24Hr. : 12Hr.

Anchorage, AK

Athens

Atlanta, GA

Auckland

Bangkok

Berlin

Cairo

Calcutta

Chicago, IL

Denver, CO

Hong Kong

Press → to select your local city. Press RETURN to set.

3. Set the local time as you would from the CLOCK screen.

Displaying the CLOCK Screen

Use **←** and **→** to select CLOCK DISPLAY and press **RETURN**. The CLOCK screen appears.

Selecting Cities

The WORLD TIME screen can simultaneously display the time for five different cities. To select the cities you want to display, proceed as follows.

1. While viewing the WORLD TIME screen, use **←** and **→** to select CITY SET and press **RETURN**. The cursor moves to the first of the five cities and this message appears:

Move cursor to city you want to change and press RETURN.

2. Use **←**, **→**, **↑**, and **↓** to select one of the five cities. The cities are selected in a cyclic way.
3. Press **RETURN** when the city that you want to change is selected. You can also press **CANCEL** if you decide not to change the setting. If you press **RETURN**, the CITY SETTING screen appears.

<< CITY SETTING >>		CITY LIST
CITY NAME :	Tokyo	Anchorage, AK
D.S.T. :	STANDARD	Athens
		Atlanta, GA
		Auckland
		Bangkok
		Berlin
		Cairo
		Calcutta
		Chicago, IL
		Denver, CO
		Hong Kong
COUNTRY :	Japan	
TIME DIFFERENCE :	+14	

Press → to select a city name. Press RETURN to set.

4. With the cursor located on CITY NAME, press **→** to move the cursor to the top of the list of cities. This message will appear:

Select a city name and press RETURN to set.

5. Use **↑**, and **↓** to select a city and press **RETURN** to set the city.
6. To set the D.S.T. for the city, use **↑**, and **↓** to move the cursor to D.S.T. and press **(SPACE BAR)** to toggle between STANDARD and SUMMER.

- *STANDARD means no daylight saving time. SUMMER means that one hour is added to the standard time.*
 - *The CITY SETTING screen displays the country of the selected city as well as the time difference between that city and your local city. These items cannot be edited.*
7. After completing the setting, press **RETURN** to display the WORLD TIME screen.

File Management

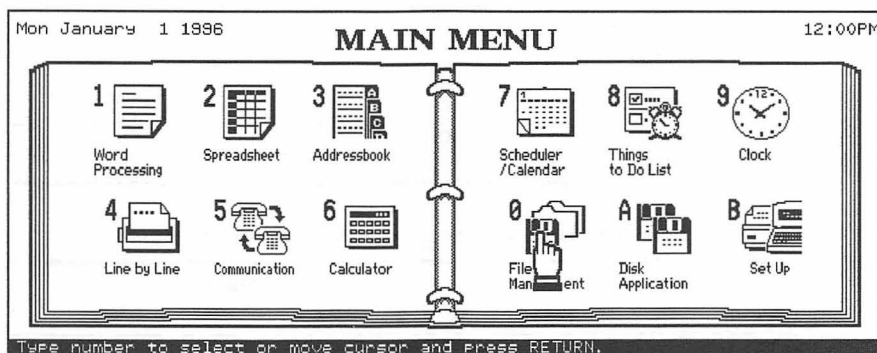
The File Management Mode

The File Management mode is used to help you organize your files. The available operations are carried out on two different screens: MEMORY INDEX and DISK INDEX.

To use the File Management functions, both of these index screens must be accessed through the File Management mode.

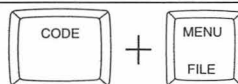
How to Start?

1. Switch the machine on to display the MAIN MENU.



2. Type "0" or move the cursor to 0. File Management using the cursor keys and press **RETURN**. The MEMORY INDEX appears.

How to Finish?



To exit the File Management mode and return to the MAIN MENU, press **CODE** + **MENU** (**FILE**). If the MEMORY INDEX is displayed, press **MENU** to display the function menu, select EXIT and press **RETURN**. Press **CANCEL** without displaying the function menu.

About the Different Types of Files

This machine allows for the creation and management of many different types of files. Each individual file is stored under a specific file name and file name extension.

A temporary file name is given by the machine to a new file when you create the file. Except for the User Dictionary and Abbreviated Phrase files, which have a fixed file name, the machine asks you to enter a specific file name when you decide to save a file.

The file name extension allows the machine to distinguish between different types of files. This extension is automatically created by the machine and you can never change it. See the next table for a list of file name extensions.

The different types displayed on the MEMORY INDEX screen

Type	Extension
WORD PROCESSING	.WPT
SCHEDULER/CALENDAR	.DTB
ADDRESS BOOK	.MRG
THING TO DO LIST	.TDL
COMMUNICATION	.CPF
USER DICTIONARY	.DCT
ABBREVIATED PHRASE	.PHR

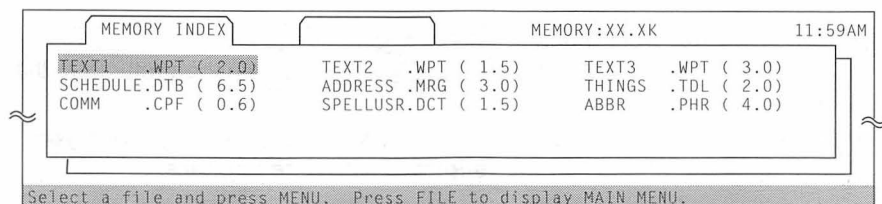
The different types displayed on the DISK INDEX screen

Type	Extension
WORD PROCESSING	.WPT
SCHEDULER/CALENDAR	.DTB
ADDRESS BOOK	.MRG
SPREADSHEET	.SPR
THINGS TO DO	.TDL
COMMUNICATION SETTINGS	.CPF
ASCII TEXT	.TXT
USER DICTIONARY	.DCT
ABBREVIATED PHRASE	.PHR

- *ASCII text files (.TXT) files are external files, created on the diskette with a personal computer. Since your machine does not allow for changes in a file name extension, be sure to give the proper extension to the files that you create on a PC before trying to read them on your machine.*

MEMORY INDEX Screen

The MEMORY INDEX screen appears when you start the File Management mode.



The number following the indicator MEMORY: indicates the free space in the memory in kilobytes.

File Length and Remaining Memory Space

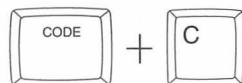
The numbers displayed in parentheses at the right of the file names indicate the size of the files in kilobytes.

Selecting a File

A file name can be selected by moving the cursor with the cursor keys. If you have more files in memory than the amount that can be displayed on the screen, **↑** and **↓** will scroll the display. Use **CODE** + **↑** (**PRES**) and **CODE** + **↓** (**NEXTS**) to scroll faster.

Functions Available on the MEMORY INDEX Screen

Copying a File in Memory



You may wish to edit a file and keep both the old and new version in memory. Make a copy of the file before editing it.

1. Move the cursor on the MEMORY INDEX screen to the file that you want to copy.
2. Press **MENU** to display the menu.

3. Use and to select COPY, and press . The following message appears:

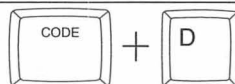
```
Type filename and press RETURN.
FILENAME: XXXXXXXX.WPT
```

- **Short cut:** Instead of (2) and (3), press + .
4. Input the new file name and press . The system then returns to the MEMORY INDEX screen.
- **If the specified new file name already exists in the memory when you press in step (4), the following message appears:**

```
Filename exists. Press RETURN to overwrite or type new name and press RETURN.
FILENAME: XXXXXXXX.WPT
```

- Press to overwrite the file with the same file name, or type a new file name and press to copy your data under a different file name. Press to exit without copy mode.
- You cannot copy the User Dictionary, Abbreviated Phrase, Scheduler / Calendar, Address Book, Things to Do List, or Information files.

Deleting Files from the Memory



COPY RENAME DISK SAVE LIST PRINT EXIT

Deletion of unwanted files is useful to make room in the memory for new files.

1. Move the cursor on the MEMORY INDEX screen to the file that you want to delete.
2. Press to display the menu.
3. Use and to select DELETE, and press . This message will appear:

```
Press SPACE to select file(s) and press RETURN. (*)=Selected file(s)
```

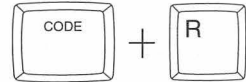
- **Short cut:** Instead of (2) and (3), press + .
4. To delete a file(s), move the cursor to each file and press to mark the file with an asterisk (*). Pressing again deselects the file.

- When the files are selected, press **RETURN** to delete. This message will appear:

Are you sure you want to delete? Press Y(yes) or N(no).

- Press **Y** to start deleting or **N** to exit.
After all files have been deleted, the MEMORY INDEX is updated.
 - You cannot select Scheduler / Calendar, Address Book, Things to Do List, Communication, User Dictionary, or Abbreviated Phrase files for deletion.*
 - The machine will beep if no file is marked.*

Renaming a File in Memory



COPY DELETE **RENAME** DISK SAVE LIST PRINT EXIT

Renaming files is often useful when you want to improve the organization of your data.

- Move the cursor on the MEMORY INDEX screen to the file that you want to rename.
- Press **MENU** to display the menu.
- Use **←** and **→** to select RENAME, and press **RETURN**. The following message appears:

Type filename and press RETURN.
FILENAME: XXXXXX■.XXX

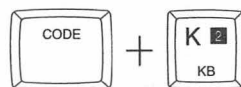
- Short cut:** Instead of (2) and (3), press **CODE** + **R**.
- Input the new file name and press **RETURN** to rename.
- If the specified new file name already exists when you press **RETURN** in step (4), the following message appears:**

Filename exists. Type new filename and press RETURN.
FILENAME: XXXXXX■.XXX

Proceed as in step (4), using a different file name.

- Pressing **CANCEL** while a message is displayed cancels the operation and returns the system to the MEMORY INDEX screen.
- You cannot rename the User Dictionary or Abbreviated Phrase files.**

Switching to the DISK INDEX Screen



COPY DELETE RENAME **DISK** SAVE LIST PRINT EXIT

This function is used to display the list of files saved on a diskette.

1. Insert the diskette into the drive.
2. Press **MENU** to display the menu.
3. Use **←** and **→** to select DISK, and press **RETURN**. The DISK INDEX screen shown on page 274 appears.
- **Short cut:** Instead of (2) and (3), press **CODE** + **K**.

Transferring Files from Memory to Diskette

COPY DELETE RENAME DISK **SAVE** LIST PRINT EXIT

The SAVE function is used to copy one or several files from the memory to a diskette. Once a file is saved on a diskette, you may delete it from the memory in order to make room for new documents. A diskette can contain about 730,000 characters of text (or about 720 pages) in case of 2DD or 1,460,000 characters (or about 1440 pages) in case of 2HD.

1. Insert a diskette in the drive.
2. Move the cursor on the MEMORY INDEX screen to the file that you want to save on the diskette.
3. Press **MENU** to display the menu.
4. Use **←** and **→** to select SAVE, and press **RETURN**. This message will appear:

Press SPACE to select file(s) and press RETURN. (*)=Selected file(s)

- **Short cut:** Instead of (3) and (4), press **CODE** + **S**.
5. To save a file(s), move the cursor to each file and press **(SPACE BAR)** to mark the file with an asterisk (*). Pressing **(SPACE BAR)** again deselects the file.
 6. When the files are selected, press **RETURN** to save. During saving, the cursor moves to the file being saved. Press **CANCEL** to stop the process. The asterisks disappear one by one as the files are saved.
 - *The machine will beep if no file is marked.*
 7. If the file name already exists on the diskette, the following message appears:

Filename exists. Press RETURN to overwrite or type new name and press RETURN.
FILENAME: XXXXXX.XXX

8. Press **RETURN** to overwrite the file with the same file name, or type a new file name and press **RETURN** to save the file under another file name. Press **CANCEL** to exit the SAVE mode.

- **Overwriting replaces the old data with the new data.**
- **If you try to save a User Dictionary or Abbreviated Phrase file on a diskette that already contains such a file, one of these messages appears:**

User dictionary already exists. Press RETURN to overwrite.

Abbreviated phrase memory already exists. Press RETURN to overwrite.

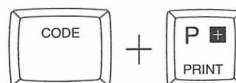
- **Press **RETURN** to overwrite the file, or **CANCEL** to exit the SAVE mode.**
 - **Overwriting replaces the old data with the new data.**
9. If the diskette becomes full, one of these messages appears:

Disk is full. Insert another and press RETURN.

Too many files on disk. Insert another and press RETURN.

10. Insert another diskette and press **RETURN** to save the remaining files on the new diskette. You may also press **CANCEL** to exit the SAVE mode.

Printing a list of files



COPY DELETE RENAME DISK SAVE **LIST PRINT** EXIT

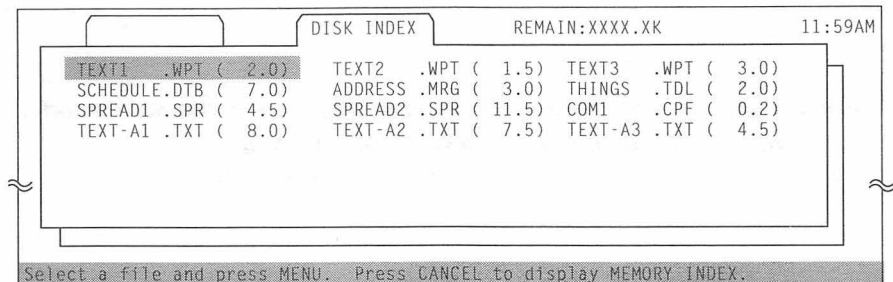
This function is used to print a list of the files stored in the memory.

1. Press **MENU** to display the menu.
 2. Use **←** and **→** to select LIST PRINT, and press **RETURN**.
- **Short cut:** Instead of (2) and (3), press **CODE** + **P** (**PRINT**).
 - *The file names and byte counts are printed in three columns.*

MEMORY		Used for WP TEXT: 12.1 Free for WP TEXT: 20.5			
LETTER-1.WPT	4.4	LETTER-2.WPT	2.9	REPORT-1.WPT	2.1
REPORT-2.WPT	2.8	SCHEDULE.DTB	0.1	ADDRESS .MRG	1.8
1995 .TDL	7.0	\$\$COMPUS.CPF	0.6	SPELLUSR.DCT	2.2
ABBR .PHR	1.1				

DISK INDEX Screen

In the explanations below, we assume that the DISK INDEX screen is displayed. To display that screen, refer to "Switching to the DISK INDEX Screen" on page 272.



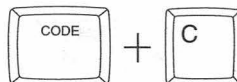
You may remove a diskette and insert another one when the machine is not busy reading or writing to the diskette. While the diskette is being read, this message will appear:

Reading disk directory....please wait.

After inserting a new diskette, to display the new list of files, press **CODE** + **F**.

Functions Available on the DISK INDEX Screen

Copying a File on Diskette



COPY DELETE RENAME MEMORY LOAD CONVERT DISK DELETE LIST PRINT

1. With the DISK INDEX displayed, move the cursor to the file that you want to copy.
2. Press **MENU** to display the menu.
3. Use **←** and **→** to select **COPY**, and press **RETURN**. The following message appears:

Insert destination disk and press RETURN.

- **Short cut:** Instead of (2) and (3), press **CODE** + **C**.

4. Insert the destination diskette and press **RETURN** or press **CANCEL** to return to the DISK INDEX screen. If you want to make a copy onto the same diskette, press **RETURN**, without changing diskettes. This message will appear:

```
Type filename and press RETURN.
FILENAME: XXXXXXXX.XXX
```

5. Input the new file name and press **RETURN**. The following message is displayed during the copy operation

```
Copying the file ... please wait.
```

and disappears after completion. The system then returns to the DISK INDEX screen.

- ***If the specified new file name already exists on the inserted diskette when you press **RETURN** in step (5), the following message appears:***

```
Filename exists. Press RETURN to overwrite or type new name and press RETURN.
FILENAME: XXXXXXXX.XXX
```

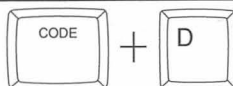
- ***Press **RETURN** to overwrite the file with the same file name, or type a new file name and press **RETURN** to copy the file under a different file name. Press **CANCEL** to exit without copy mode.***
- ***When a User Dictionary or Abbreviated Phrase file is selected for copying, the machine does not ask for a file name in step (4). The file is immediately copied. If a User Dictionary or Abbreviated Phrase file is already stored on the destination diskette, one of these messages will appear:***

```
User dictionary already exists. Press RETURN to overwrite.
```

```
Abbreviated phrase memory already exists. Press RETURN to overwrite.
```

- ***Press **RETURN** to overwrite the file, or **CANCEL** to exit the COPY mode.***

Deleting Files from a Diskette



COPY **DELETE** RENAME MEMORY LOAD CONVERT DISK DELETE LIST PRINT

File deletion is useful when the diskette is full and you want to make room for new files.

1. Insert a diskette in the drive.
2. Move the cursor to a file that you want to delete.
3. With the Disk Index displayed, press **MENU** to display the menu.
4. Use **←** and **→** to select **DELETE**, and press **RETURN**. The following message appears:

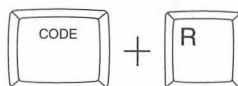
Press SPACE to select file(s) and press RETURN. (*)=Selected file(s)

- **Short cut:** Instead of (3) and (4), press **CODE** + **D**.
5. To delete a file(s), move the cursor to each file and press **(SPACE BAR)** to mark the file with an asterisk (*). Pressing **(SPACE BAR)** again deselects the file.
 6. When the files are selected, press **RETURN** to delete. This message will appear:

Are you sure you want to delete? Press Y(yes) or N(no).

7. Press **Y** to start deleting or **N** to exit.
During deletion, the cursor moves to the file being deleted. Press **CANCEL** to stop the process. After all files have been deleted, the DISK INDEX is updated.
- *The machine will beep if no file is marked.*

Renaming a File on Diskette



COPY DELETE **RENAME** MEMORY LOAD CONVERT DISK DELETE LIST PRINT

To change the name of a file on diskette, follow these steps.

1. With the DISK INDEX displayed, move the cursor to the file that you want to rename.
2. Press **MENU** to display the menu.
3. Use **←** and **→** to select RENAME, and press **RETURN**. The following message appears:

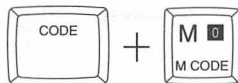
```
Type filename and press RETURN.
FILENAME: XXXXXXXX.XXX
```

- **Short cut:** Instead of (2) and (3), press **CODE** + **R**.
4. Input the new file name and press **RETURN**. The above message disappears, and the DISK INDEX screen is updated.
- If the specified new file name already exists when you press **RETURN** in step (4), the following message appears:

```
Filename exists. Type new filename and press RETURN.
FILENAME: XXXXXXXX.XXX
```

- Proceed as in step (4), using a different file name.
- Pressing **CANCEL** while a message is displayed cancels the operation and returns the system to the DISK INDEX screen.
- **You cannot rename the User Dictionary or Abbreviated Phrase files.**

Switching to the MEMORY INDEX Screen

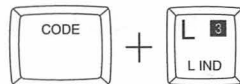


COPY DELETE RENAME **MEMORY** LOAD CONVERT DISK DELETE LIST PRINT

To return to the MEMORY INDEX screen from the DISK INDEX screen, proceed as follows.

1. Press **MENU** to display the menu.
 2. Use **←** and **→** to select MEMORY, and press **RETURN**. The MEMORY INDEX screen appears immediately. Press **CANCEL** to escape from the menu.
- **Short cut:** Instead of (1) and (2), press **CODE** + **M**.

Transferring Files from Diskette to Memory



COPY	DELETE	RENAME	MEMORY	LOAD	CONVERT	DISK DELETE	LIST PRINT
------	--------	--------	--------	------	---------	-------------	------------

The LOAD function is used to copy one or several files from a diskette to the memory.

1. Insert the diskette in the drive.
2. Move the cursor to a file that you want to load.
3. With Disk Index displayed, press **MENU** to display the menu.
4. Use **←** and **→** to select LOAD, and press **RETURN**. An asterisk marks the selected file and this message appear:

Press SPACE to select file(s) and press RETURN. (*)=Selected file(s)

- **Short cut:** Instead of (3) and (4), press **CODE** + **L**.
- 5. To load a file(s), move the cursor to each file and press **(SPACE BAR)** to mark the file with an asterisk (*). Pressing **(SPACE BAR)** again deselects the file.
- 6. When the files are selected, press **RETURN** to load. You cannot load Spreadsheet, ASCII.
- 7. During the load operation, the cursor moves to the file being loaded. Press **CANCEL** to stop the process. The asterisks disappear one by one as the files are transferred.
- *The machine will beep if no file is marked.*
- **If the file name already exists in the memory, the following message appears:**

Filename exists. Press RETURN to overwrite or type new name and press RETURN.
FILENAME: XXXXXXXX.XXX

- Press **RETURN** to overwrite the file with the same file name, or type a new file name and press **RETURN** to load the file under a different file name. Press **CANCEL** to exit the load mode.
- **When a User Dictionary or Abbreviated Phrase file is selected for loading, and such a file already contains data in the memory, one of these messages will appear:**

User dictionary already exists. Press RETURN to overwrite.

Abbreviated phrase memory already exists. Press RETURN to overwrite.

- **Press RETURN to overwrite the file, or CANCEL to exit the load mode.**
- **When a Calendar / Scheduler, Address Book, or Things to Do List file is selected for loading, and such a file already contains data in the memory, this message will appear:**

Erase current file and load file from disk? Press RETURN(yes) or CANCEL(no).

- **Press RETURN to overwrite the file, or CANCEL to exit the LOAD mode.**
- **When a Communication file is selected for loading, this message will appear whether or not the memory already contains communication settings:**

Erase current settings and load file from disk? Press RETURN(yes) or CANCEL(no).

- **Press RETURN to overwrite the settings, or CANCEL to exit the LOAD mode.**
- **If the memory becomes full, one of these messages appears:**

Not enough memory remaining.

Too many files in memory. Press CANCEL to exit.

- **Press RETURN or CANCEL to exit the LOAD mode.**
- **If you are loading more than one file and press RETURN, loading will continue.**

Converting Files

You may wish to use the files created in the Word Processing mode in a Personal computer or vice versa. To do this, you must be sure that the files are compatible. This means that the files must be in ASCII format and that the files must be contained on a 1.44M/720K DOS formatted diskette.

Converting a File to ASCII Format

The Brother Super PowerNote and computers do not store data in the same format. In order to transfer your text files, the files must be converted to a standard text format that both units can understand. This standard format is called ASCII.

The CONVERT function transforms your text files from the Word Processing format to an ASCII file format. It can also transform ASCII file format files that were created on a computer into the Word Processing format that your Brother unit uses.

What is an ASCII File?

An ASCII file, which contains text, is stored in a format called ASCII (American Standard Cord for Information Interchange). It consists of printable data containing no special formatting codes for underlining, boldface, etc. These special formatting features, such as underlining, do not translate correctly between your unit and a computer. Therefore, when a file is converted to ASCII, all special formats are eliminated. Once the file is transferred, the file must be reformatted and any special effects must be added.

Converting a Word Processing File to an ASCII File

COPY	DELETE	RENAME	MEMORY	LOAD	CONVERT	DISK DELETE	LIST PRINT
					WP TEXT .WPT → ASCII .TXT		
					ASCII .TXT → WP TEXT .WPT		

A Word Processing file can be converted into an ASCII file for further editing on a PC. The Word Processing file can only be converted if it is stored on a diskette.

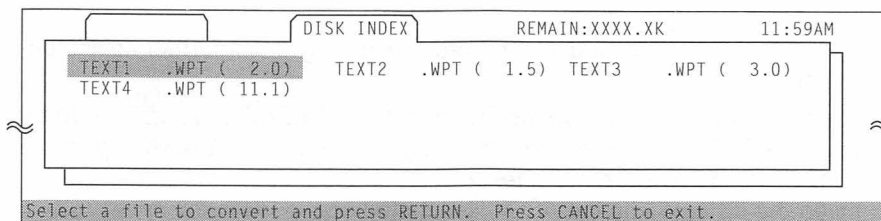
1. Insert the diskette containing the file to be converted in the drive.
2. With the Disk Index displayed, press **MENU** to display the menu.
3. Use **←** and **→** to select CONVERT, and press **RETURN** or **↓** to display the submenu.
4. Use **↑** and **↓** to select WP TEXT.WPT → ASCII.TXT and press **RETURN**.
The machine checks the internal memory. If Word Processing files are found in the memory, this message appears:

All text files in memory must be saved on disk before beginning.
Press CODE+S to save files, CODE+D to delete files.

The CONVERT function makes use of all of the text memory and all your Word Processing files must be saved on diskette or deleted before you start.

5. To save the files, insert a diskette and press **CODE** + **S**. To delete the files, press **CODE** + **D**. Press **CANCEL** to return to the DISK INDEX screen.
- *The CONVERT function does not affect the Addressbook, User Dictionary, Abbreviated Phrase file, Scheduler / Calendar, Things to Do List, or Communication files. You do not need to worry about losing these files when using the CONVERT function.*

6. If you have saved your Word Processing files on a different diskette, remove that diskette and insert the diskette which contains the file to be converted. This step is not necessary if you have deleted the files or saved them on the same diskette. The DISK INDEX screen shows only the Word Processing files (extension .WPT). Only Word Processing files may be converted.



7. Move the cursor to the file that you want to convert and press **RETURN**. This message will appear:

Insert destination disk and press RETURN.

8. Insert the destination diskette. The destination diskette must be a 1.44M/720K DOS formatted diskette. (You may also convert the file and save it to the same diskette.) Press **RETURN**. This message appears:

Type filename and press RETURN.
FILENAME: XXXXXXXX.TXT

9. Type a file name and press **RETURN**. This message will be displayed during the conversion

Converting the file....please wait.

and will be replaced with this message when the operation is completed:

Converting completed. Insert original disk and press RETURN.

When **RETURN** is pressed after inserting the original diskette, the DISK INDEX screen, the same as in step (6), appears. You are still in the CONVERT mode, so that you can continue converting other files. You can also exit that mode by pressing **CANCEL**.

The file on diskette is now in ASCII format. You may take the diskette containing the ASCII file and insert it into the PC. Personal Computer word processing programs have the ability to read (or import) ASCII files. By using your PC word processing software program, retrieve the ASCII file from the diskette.

Converting an ASCII File to a Word Processing File

COPY	DELETE	RENAME	MEMORY	LOAD	CONVERT	DISK DELETE	LIST	PRINT
					WP TEXT	.WPT→ASCII	.TXT	
					ASCII	.TXT→WP TEXT	.WPT	

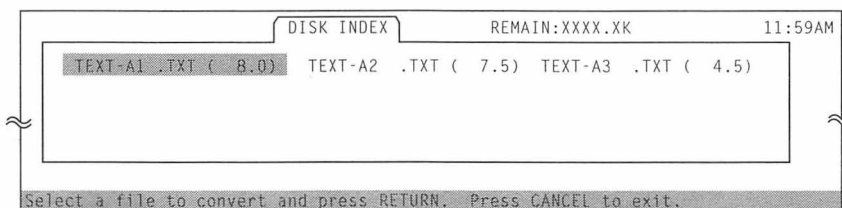
An ASCII file can be converted into a Word Processing file for further editing on your machine.

- *Your machine can only read the root directory of a DOS disk. Make sure to save the ASCII file onto the root directory of a diskette before you try to convert the file on your machine.*
1. Insert the diskette with the ASCII file created on the PC in the drive.
 2. With the Disk Index displayed, press **MENU** to display the menu.
 3. Use **←** and **→** to select CONVERT, and press **RETURN** or **↓** to display the submenu.
 4. Use **↑** and **↓** to select ASCII.TXT → WP TEXT.WPT and press **RETURN**. The machine checks the internal memory. If Word Processing files are found in the memory, this message appears:

All text files in memory must be saved on disk before beginning.
Press CODE+S to save files, CODE+D to delete files.

The CONVERT function makes use of all of the text memory and all your Word Processing files must be saved on diskette or deleted before you start.

5. To save the files, insert a diskette and press **CODE** + **S**. To delete the files, press **CODE** + **D**. Press **CANCEL** to return to the DISK INDEX screen.
- *The CONVERT function does not affect the User Dictionary, Abbreviated Phrase file, Scheduler / Calendar, Addressbook, Things to Do List, or Communication files. You do not need to worry about losing these files when using the CONVERT function.*
6. If you have saved your Word Processing files on a different diskette, remove that diskette and insert the diskette which contains the file to be converted. This step is not necessary if you have deleted the files or saved them on the same diskette. The DISK INDEX screen shows only the ASCII files (extension .TXT).



7. Move the cursor to the file that you want to convert and press **RETURN**. This message will be displayed during the read operation:

Converting the file....please wait.

After the read operation is finished, the following message will be displayed:

Insert destination disk and press RETURN.

8. Insert the destination diskette and press **RETURN**. This message appears:

Type filename and press RETURN.
FILENAME: XXXXXXXX.WPT

9. Type a file name and press **RETURN**. Be sure that the extension, WPT is added to the end of the filename. This message will be displayed during the write operation.

Saving the file to disk.... please wait.

and will be replaced with this message when the operation is completed:

Converting completed. Insert original disk and press RETURN.

The DISK INDEX displays the updated list of Word Processing files. When **RETURN** is pressed after inserting the original diskette, the DISK INDEX screen, the same as in step (6), appears. You are still in the CONVERT mode, so that you can continue converting other files. You can also exit that mode by pressing **CANCEL**.

After exiting the convert mode, you will be viewing the Disk Index. At the Disk Index, press **MENU** and select LOAD of Load the new file from the diskette to memory, you may then go to the Word Processing mode and use the newly converted file.

Disk Delete (Deleting All Files)

COPY	DELETE	RENAME	MEMORY	LOAD	CONVERT	DISK DELETE	LIST PRINT
------	--------	--------	--------	------	---------	-------------	------------

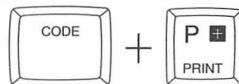
DISK DELETE erases all the files and initializes the diskette.

- ***Even the files which are not displayed on the DISK INDEX screen (files created on a PC) will be erased.***
1. With the DISK INDEX displayed, press **MENU** to display the menu.
 2. Use **←** and **→** to select DISK DELETE, and press **RETURN**. The following message appears:

Delete all data on the disk? Press Y(yes) or N(no).

3. If you press **Y**, the files are deleted from the diskette. Press **N** to avoid deleting.
4. After you press **Y** a message will ask you to select the format of the diskette to be deleted.

Printing a list of files



COPY DELETE RENAME MEMORY LOAD CONVERT DISK DELETE LIST PRINT

This function is used to print a list of the files stored in the disk.

1. Insert a diskette in the drive.
2. Press **MENU** to display the menu.
3. Use **←** and **→** to select LIST PRINT, and press **RETURN**.
 - **Short cut:** Instead of (2) and (3), press **CODE** + **P** (**PRINT**).
 - The file names and byte counts are printed in three columns.
 - You will be able to print only the list of the files that appear on the **DISK INDEX** screen.

DISK		Used: 189.4 Free:1268.2			
LETTER-1.WPT	4.4	LETTER-2.WPT	2.9	LETTER-3.WPT	4.4
REPORT-1.WPT	2.1	REPORT-2.WPT	2.8	REPORT-3.WPT	2.8
1996-1 .DTB	0.1	1996-2 .DTB	2.5	1996-3 .DTB	2.5
ADDRESS .MRG	1.8	SCHOOL .MRG	5.6	STORES .MRG	1.8
ADDRESS .SPR	8.5	BUDGET .SPR	9.7	CHECKS .SPR	9.8
COMPOUND.SPR	9.0	EXPENSE .SPR	5.3	INTRO .SPR	8.7
LOANS .SPR	5.9	SPLAN .SPR	8.2	1995 .TDL	7.0
\$\$COMPUS.CPF	0.6	JOHN .CPF	0.6	TEXT-1 .TXT	27.2
TEXT-2 .TXT	1.0	TEXT-3 .TXT	14.0	TEXT-4 .TXT	30.9
SPELLUSR.DCT	2.2	ABBR .PHR	1.1		

Disk Application

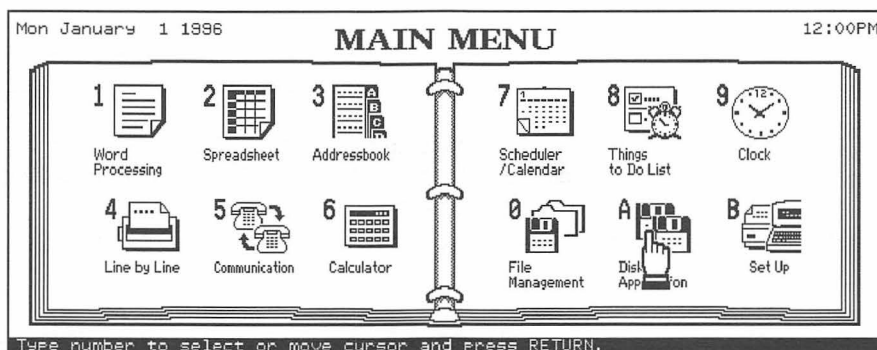
IMPORTANT: *Since the disk application program uses the entire memory, all text files in internal memory must be saved to diskette before the program can be accessed. Failure to save your files to diskette before using the disk application function will cause you to lose your text files. It is always a good practice to save every text file to diskette after a Word Processing work session to provide a back up of your text files in case anything should go wrong.*

The Disk Application Mode

The last option on the MAIN MENU, DISK APPLICATION is used for running programs that are available on diskette. A diskette containing the TETRIS and TURN-ABOUT games, and Spreadsheet Templates comes with your machine. The diskette also contains a Conversion software, that runs on a PC.

How to Start?

1. Switch the machine on to display the MAIN MENU.



2. Insert the APPLICATION diskette.
 3. Type "A" or move the cursor to A. Disk Application using , , , and , then press . The machine checks the area of the internal memory where Word Processing files are stored. If Word Processing files are found in that area, this message appears:
- **Short cut:** Press + .

All text files in memory must be saved on disk before beginning.
Press CODE+S to save files, CODE+D to delete files.

4. Since each game makes use of all the area of the memory where Word Processing files are stored, you must transfer all your Word Processing files to the diskette or delete them before a game is loaded. Press **CODE** + **S** to save the files, or **CODE** + **D** to delete them. You may also press **CANCEL** to return to the MAIN MENU.
- *The files can be saved on the APPLICATION diskette or on a data diskette. To save the files on a data diskette, insert the desired diskette before pressing **CODE** + **S**.*

To delete the files...

- If you do not want to save your files (because you have already saved them, for example), press **CODE** + **D**. This message will appear:

Are you sure you want to delete? Press Y(yes) or N(no).

- If you press **Y**, all the Word processing files are deleted.
- If you press **N**, the machine returns to the normal MAIN MENU, and you can select another mode.

To save the files...

- Press **CODE** + **S**. The MEMORY INDEX displays the list of the Word Processing files currently stored in the memory. The first file that is going to be saved is displayed in reverse color and a message asks you to wait:

Saving the file to disk....please wait.

- After the file has been saved, the machine automatically starts saving the next file. When all files displayed on the MEMORY INDEX have been saved, the DISK APPLICATION screen appears.
- If a file with exactly the same file name already exists on the diskette, this message appears:

Filename exists. Press RETURN to overwrite or type new name and press RETURN.

FILENAME:XXXXXX.WPT

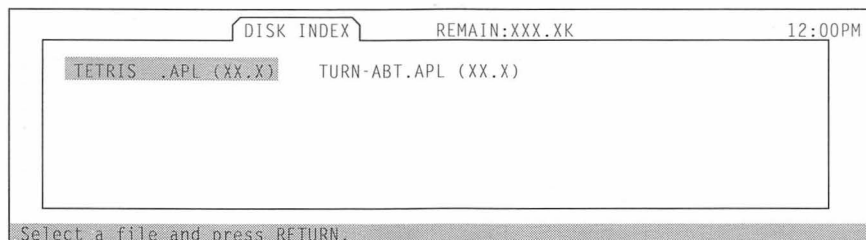
- Type a new file name and press **RETURN** to save the file under a different file name, or press **RETURN** without typing a new file name to overwrite the file on the diskette. Press **CANCEL** to skip saving the file. In that case, a message asks you to confirm that you want to delete that file:

Press RETURN to delete current file, CANCEL to exit.

- If you press **RETURN**, the file will be deleted and the machine will proceed saving the next file. If you press **CANCEL**, the machine returns to the MAIN MENU.

After the files are saved or deleted...

After your files have been saved or deleted, the DISK APPLICATION screen appears:



1. Use the cursor keys to select the desired application and press **RETURN** to start the application, or **CANCEL** to return to the MAIN MENU.

How to Finish



To stop playing at any time and return to the MAIN MENU, press **MENU**, then **CANCEL**. If you press **MENU** again instead of **CANCEL**, the game restarts where you left it.

Tetris

Pieces made of four small squares fall one by one from the top of the screen into an empty pit. While a piece is falling, you can move it to the right or to the left and rotate it so that the piece fills exactly the gaps at the bottom of the pit. The pieces come in seven different shapes (see illustration below). When one row of the pit is filled without gaps, it is deleted. This challenging game of speed and maneuvering consists of deleting as many lines as possible. As the lines with gaps build up at the bottom of the pit, you have less time to adjust the position of the falling piece. The game ends when the pit is filled with such lines.

When you select TETRIS from the DISK APPLICATION screen, this logo appears:

brother TETRIS

A Copyright Notice screen comes after the logo, then the TETRIS SET UP screen appears. (To get to that screen faster, press **(SPACE BAR)** while the logo is being displayed.)



Setting the LEVEL and HEIGHT

REV 2.0

LEVEL

0	1	2	3	4
5	6	7	8	9

HEIGHT

0	4	7
11	15	<<

Select LEVEL and HEIGHT by using J or L key.

Press RETURN to start.



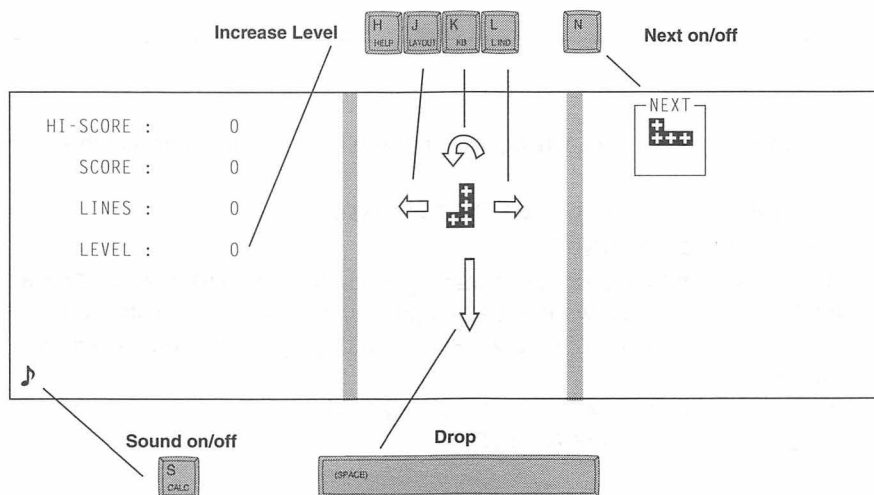
LEVEL and HEIGHT determine the difficulty of the game.

The level sets the speed at which the pieces fall from the top of the screen. You can select values from 0 (slow) to 9 (fast).

The height sets the number of rows at the bottom of the pit that are already randomly filled. Normally, you will start with an empty pit (0). If you select 10 (maximum), you will start the game with ten rows with gaps at the bottom of the pit. You may challenge someone else with the same configuration which you last played by selecting "<<" on the HEIGHT menu. This will give you the same block placement from the previous game.

1. To set the LEVEL, use **L** to increase or **J** to decrease. (**H** can also be used to increase the LEVEL while playing, but you cannot decrease the LEVEL while playing).
2. When the LEVEL is set, press **RETURN** or **(SPACE BAR)** to start setting the HEIGHT.
3. To set the HEIGHT, use **L** to increase or **J** to decrease.
4. Press **RETURN** or **(SPACE BAR)** to start playing. The TETRIS screen appears.

Playing



1. To move a falling piece to the left, use **J** or **←**. To move it to the right, use **L** or **→**. To rotate it, use **K** or **↓**.
2. The faster a piece falls, the more points you get when a row is deleted. Drop the piece by pressing **(SPACE BAR)**, **↑**, or **↓** when you are sure it is aligned.
3. When a game is over, the machine asks if you want to start again:
4. Press **RETURN** to reset and play again, or **CANCEL** to return to the MAIN MENU.

Do you want to play again?
Press RETURN(yes) or CANCEL(no).

- *The difficulty of the game (LEVEL) will automatically increase as the game progresses depending on the number of lines deleted. The game will jump from LEVEL 0 to LEVEL 1 after deleting 11 lines, then it will jump from LEVEL 1 to LEVEL 2 after deleting 22 lines. The LEVEL will keep jumping up until reaching LEVEL 9.*

The Indicators

Indicator	Meaning
HI-SCORE	Indicates the highest score of a series of games.
SCORE	Indicates the score for the current game.
LINES	Indicates the number of deleted lines.
LEVEL	Indicates the selected LEVEL while playing
♪	Indicates that the sound is on (this can be switched off).
NEXT	Indicates the shape of the next piece (this can be switched off).

Other Options

Other options are available:

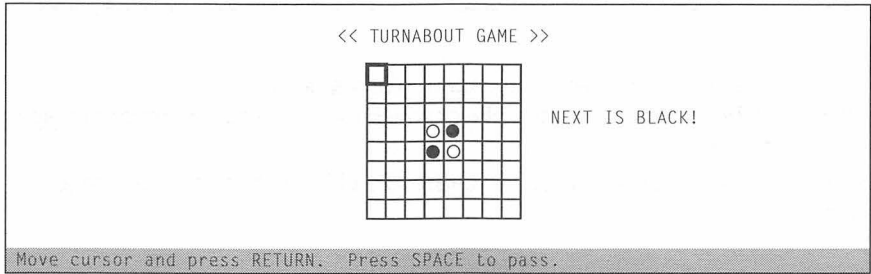
- **[H]**: to increase the LEVEL while playing (there is no key to decrease the LEVEL while playing).
- **[N]**: to switch the display of the NEXT piece on/off.
- **[S]**: to turn the sound on/off.
- **[MENU]**: to switch to the Word Processing mode INPUT/EDIT screen. This is useful when you do not want to be caught playing at a time you should be working. Although the INPUT/EDIT screen is displayed, no input is actually possible.

From the INPUT/EDIT screen, press **[MENU]** again to return to your game, or **[CANCEL]** to display the MAIN MENU.

Turnabout

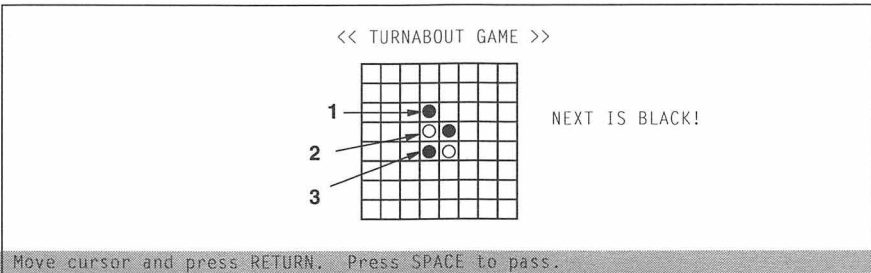
You can play this game with a friend or against the machine. Here are the rules of the game:

1. Each player is assigned a set of white or black pieces.
2. The game starts with two black and two white pieces positioned at the center of the board as shown in the next illustration.

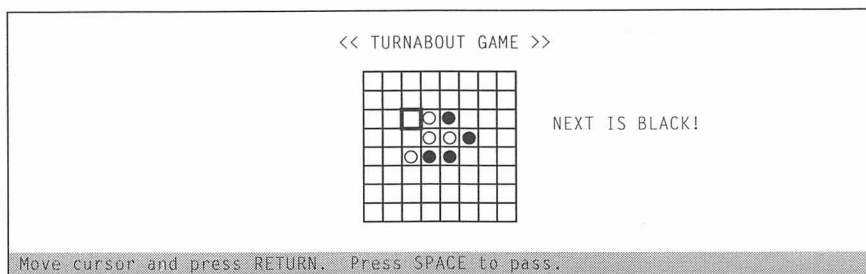


DISK APPLICATION

3. Each player alternately tries to place one piece of the color assigned to him on the board. A player can place a piece on the board only if by doing so he can capture one or more pieces of the opposite color. To capture pieces of the opposite color, a player must place his piece (piece 1 in the next illustration) in a cell adjacent to a cell that contains a piece of the opposite color (piece 2 in the next illustration). In addition, the row, column or diagonal to which piece 1 and piece 2 belong must contain another piece of the same as piece 1 (piece 3 in the next illustration). The cells between piece 1 and piece 3 must be continuously filled with pieces of the same color as piece 2. These pieces are then captured, that is, their color reverts to the color of piece 1. The next illustration shows one of the possible positions for a black piece (1) when the game has just started, as well as the captured piece (2).



4. Multiple capture is allowed. The next illustration shows a double capture by a black piece.



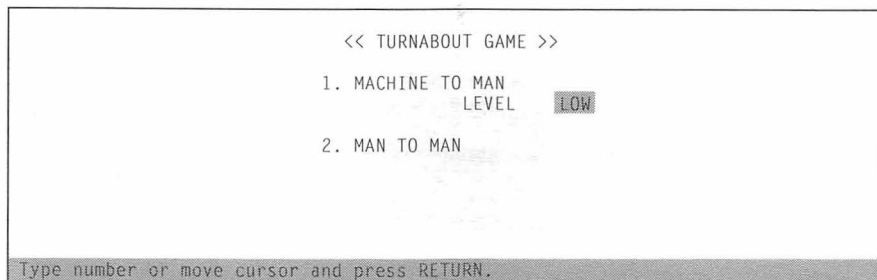
5. A player skips his turn when he cannot place a piece.
6. When all the board is filled, the player which has the bigger number of pieces on the board wins.

When you select TURN-ABT from the DISK APPLICATION screen, this logo appears:

brother **TURNABOUT**

After the logo appears, then the TURN-ABT SET UP screen appears. (To get to that screen faster, press **(SPACE BAR)** while the logo is being displayed.)

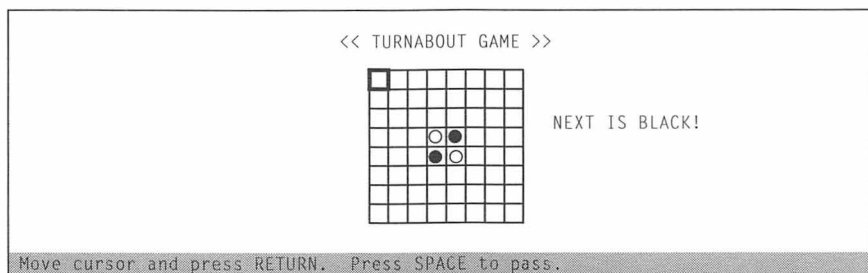
Set-up Screen



The Set-up screen allows you to select whether to play with the machine (Machine to Man) or with a friend (Man to Man).

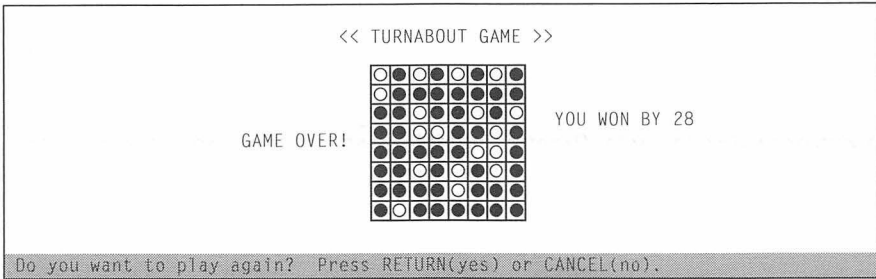
- To play with the machine, type "1" or move the cursor to Machine to Man and press **RETURN**. Use **(SPACE BAR)** to select the level of the machine (LOW or HIGH) and press **RETURN** again.
- To play with a friend, type "2" or move the cursor to Man to Man and press **RETURN**.

Playing



1. If you are playing with a friend, one player selects black and one player selects white. Black plays first. If you are playing with the machine, black is automatically selected for you, and you play first.
2. To place a piece, move the cursor (highlighted cell) to the desired position and press **RETURN**. The machine will beep if you try to place a piece in an invalid cell. If you cannot find a valid cell, press **(SPACE BAR)** to skip your turn.

- If you make a mistake, press **CODE** + **PRES** to cancel a move and return to the previous screen.
3. When the game is complete, the screen will look like this:



4. Press **RETURN** to start again, or **CANCEL** to return to the MAIN MENU.
- While playing, press **MENU** to quickly switch to the Word Processing mode INPUT/EDIT screen. This is useful when you do not want to be caught playing at a time you should be working. Although the INPUT/EDIT screen is displayed, no input is actually possible.
 - From the INPUT/EDIT screen, press **MENU** again to return to your game, or **CANCEL** to display the MAIN MENU.
 - When you want to stop the game, press **CANCEL**. Press **CANCEL** to return to the MAIN MENU again.

Conversion

PC software for converting document files between different word processing programs and Brother.

IMPORTANT: *This program was created to facilitate converting your documents from the Brother word processing format, and other leading word processing formats. Practically all formatting, text enhancement and other control codes are correctly translated, so that little or no touching up of the converted document is required. However, in some cases, the translation results are not as accurate as we would like them to be. We warn you against these situations, and we recommend that you review each file after the conversion is done to check for any irregularities.*

- *If you are using a PC with a mouse: The conversion software does not support the mouse. Use the arrow keys to scroll through the menu or press the highlighted letter to select an option.*

Introduction

The Brother Conversion Software is a utility that allows you to convert documents between different word processing formats and the Brother format.

It takes document files created by one word processing program (source files), and converts them to Brother files (destination files), and vice versa.

Practically all the formatting, text enhancement and other control codes are correctly translated, so that little or no touching up of the converted document is required.

The different possibilities are: PC → Brother

Convert From	To
Ami Pro	Brother
ASCII	
DisplayWrite®	
IBM® DCA/RFT	
IBM® Writing Assistant®	
Microsoft® Word™ family Word for DOS Word for Windows® Word for Macintosh® Computer	
Microsoft® Works	
Microsoft® Write	
pfs:® series pfs:Write® pfs:Professional Write pfs:First Choice	
WordPerfect® (Dos/Windows) Version 4.1/4.2 Version 5.0/5.1/5.2/6.0/6.1	
WordStar® WordStar 3.x/4.0 WordStar 5.0 - 7.0	
WordStar-2000®	

IBM DCA/RFT stands for IBM's Document Content Architecture, Revisable Form Text.

ASCII stands for American Standard Code for Interchange of Information.

ASCII (print) files are suitable for copying to a printer which supports backspace and form feed functions.

When converting to Microsoft Word for Macintosh, the conversion software produces Word for Dos files, which can be read by Word for Macintosh directly without any loss of formatting.

When converting to late revision word processors, the Brother Conversion Software may in some cases convert to an older revision file format, which the newer word processor can read without losing any document text or formatting.

The other possibilities is to convert vice versa as follows: Brother → PC

Convert From	To
Brother	Ami Pro Version 1 Version 2
	ASCII Document Print
	DisplayWrite Version 2 Version 3 Version 4 Version 4.2 Version 5 or 5/2
	IBM DCA/RFT
	Microsoft Word (DOS) Version 3.0 or prior Version 4.0 Version 5.0 Version 5.5
	Microsoft Word for Windows Version 1.0 Version 2.0
	Microsoft Word for Macintosh
	Microsoft Works Version 1 Version 2
	Microsoft Write
	WordPerfect (Dos/Windows) Version 4.1 Version 4.2 Version 5.0 Version 5.1 Version 5.2 Version 6.0 Version 6.1
	WordStar Version 3.x Version 4.0 Version 5.0 Version 5.5 Version 6.0 Version 7.0
	WordStar-2000 Release 1.x Release 2.x Release 3.x

Installing and Starting the Brother Conversion Software

We recommend that you make a copy of the diskette that contains the Brother Conversion Software Program before you start the installation. You can work from the copy made, and keep the original diskette in a safe place in case it is needed in the future.

Computer System Requirements

The Brother Conversion Software runs under MS-DOS on any IBM-PC, PC/AT, PS/2 and compatible computer. The computer must have at least one high density disk drive, a hard disk drive, and 512 KB or more of memory.

If your system has a color monitor, the program automatically uses it to the best advantage.

Installing and Starting from Your Hard Disk Drive

To install the Brother Conversion Software on your hard disk drive, power your computer as usual, and get the C> prompt. (If you are using Windows, exit Windows and get the C> prompt.) Then insert the Brother Conversion Software diskette in your disk drive, default to that drive (by typing either A: or B:) and type INSTALL.

For example:

```
C>A:
```

```
A>INSTALL
```

This starts the installation program which automatically creates a subdirectory, on your C: drive, named "BROTHER", and copies all necessary files into that subdirectory.

The installation program also creates a batch file, on your C: drive, called "CONVERT.BAT".

Each time you want to start the Brother Conversion Software, type the command CONVERT at the C> prompt.

For example:

```
C>CONVERT
```

Then after a brief opening screen, the main menu screen appears.

- *The top line of your screen is used to explain and to clarify the current function selected. As you move the block cursor on screen, the explanations change depending on the function.*

Your selection stays in effect even the next time you run the Brother Conversion Software, so you do not have to repeat the procedure unless you want to change your selection.

Brother → PC

The Brother → PC menu screen looks like this:

PC-Brother	Brother-PC	Source	Destination	Convert	Options	Exit
Ami Pro						
ASCII						
DisplayWrite						
IBM DCA/RFT						
Microsoft Word (Dos)						
Microsoft Word for Windows						
Microsoft Word for Macintosh						
Microsoft Works						
Microsoft Write						
WordPerfect(Dos/Windows)						
WordStar						
WordStar-2000						

Current Software Settings	
Convert From: WordPerfect 5.0/5.1/Windows	Convert To: Brother WP
Source: (empty)	AutoSelect:Yes
Destination: (empty)	Conversion Log:Yes

←: Move Choice ENTER: Select Chosen Option ESC: Exit from Window

This menu allows you to select the word processing format you wish to convert to. It will always convert your Brother files to the format of your choice. To make your selection, move the highlight bar to the format you wish to convert to. In most cases, the software will ask you to specify the version of the destination program. For example, if you select WordPerfect, the Brother Conversion Software will present a screen like this:

PC-Brother	Brother-PC	Source	Destination	Convert	Options	Exit
Ami Pro						
ASCII						
DisplayWrite						
IBM DCA/RFT						
Microsoft Word (Dos)						
Microsoft Word for Windows						
Microsoft Word for Macintosh						
Microsoft Works						
Microsoft Write						
WordPerfect(Dos/Windows)						
WordStar						
WordStar-2000						

Current Software Settings	
Convert From: WordPerfect 5.0/5.1/Windows	Convert To: Brother WP
Source: (empty)	AutoSelect:Yes
Destination: (empty)	Conversion Log:Yes

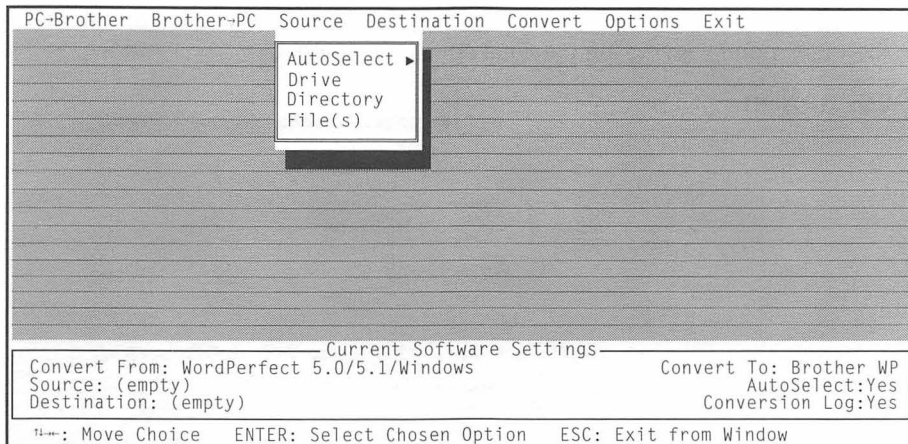
←: Move Choice ENTER: Select Chosen Option ESC: Exit from Window

Move the highlight bar to the specific version, then press [Enter]. At any time during the selection of any format or version, press [Esc] and return to the main menu.

The status panel at the bottom of the screen will show the format you have selected.

Source

The Source menu looks like this:



AutoSelect

The Brother Conversion Software is capable of automatically identifying document files belonging to your source formats. This is called the AutoSelect feature.

This feature is particularly useful when you have document files along with assorted other files in the same subdirectory, since you can then automatically exclude the irrelevant files.

You may select Yes or No for the AutoSelect feature from the sub-menu.

If the source format cannot be automatically identified, then the AutoSelect option will appear dimmed on most monitors, and cannot be selected.

Drive

Allows you to enter the letter indicating the disk drive where the source files to be converted are located.

Type the drive letter, and press [Enter].

Directory

Allows you to enter the name of the directory where the source files to be converted are located. Type the name of the directory, and press [Enter].

File(s)

Allows you to select the specific file(s) to be converted.

When you select this option, a window appears on the screen listing the files in the source drive and subdirectory. If AutoSelect was set to Yes, then only those files belonging to the source file format appear in the window. Move the highlight

to the name of the file which you want to convert and press the space bar to select that file. You may select as many files as desired, then press [Enter] to close the window. The status window at the bottom of the screen will indicate the source file name (if one file was selected), or the number of files (if multiple files were selected).

You may cancel this screen by pressing [Esc], in which case you will be returned to the main menu, leaving the previous setting unchanged.

Destination

The destination menu looks like this:

PC-Brother	Brother-PC	Source	Destination	Convert	Options	Exit
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> Location File Name(s) </div>						
<hr/> <div style="display: flex; justify-content: space-between;"> <div> Convert From: WordPerfect 5.0/5.1/Windows Source: (empty) Destination: (empty) </div> <div> Convert To: Brother WP AutoSelect:Yes Conversion Log:Yes </div> </div>						
←: Move Choice ENTER: Select Chosen Option ESC: Exit from Window						

Location

This menu allows you to indicate where (which disk and subdirectory) the converted files should be placed. When you select this option, the software displays the following screen:

PC-Brother	Brother-PC	Source	Destination	Convert	Options	Exit
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> Location File Name(s) </div> <div style="border: 1px solid black; padding: 5px; display: inline-block; margin-left: 10px;"> Different Same </div> <div style="border: 1px solid black; padding: 5px; display: inline-block; margin-left: 10px;"> Drive Directory </div>						
<hr/> <div style="display: flex; justify-content: space-between;"> <div> Convert From: WordPerfect 5.0/5.1/Windows Source: (empty) Destination: (empty) </div> <div> Convert To: Brother WP AutoSelect:Yes Conversion Log:Yes </div> </div>						
←: Move Choice ENTER: Select Chosen Option ESC: Exit from Window						

Same: Means the destination files will be placed in the same disk and subdirectory as the source files.

Different: Means the destination files will be placed in either a different disk or different subdirectory from the source files. At this time, you will be prompted to enter the destination drive and the subdirectory path.

At any time while specifying the destination file name(s), press [Esc] to return to the main menu.

The destination is always reflected in the status panel at the bottom of the screen.

File Name(s)

This option allows you to specify the name(s) of the converted file(s). As in standard DOS conventions, you may use "*" or "?" to keep portions of the name(s) the same as those of the corresponding source document file(s).

When converting files from other file formats to Brother, the converted files must always have .WPT extension, since the result of the conversion are Brother files. Therefore, only 8-letter name field can be specified.

There may be occasions when the conversion program has to break up a single source document into several Brother files. In this case, the converted file names will automatically have sequential numbers appended to their name(s). For example, if a source document name MEMO.DOC is broken up into three destination files, the converted files will be named MEMO.WPT, MEMO-1.WPT, and MEMO-2.WPT. Similarly, a file named DOCUMENT.TXT, if broken up into two files, would result in DOCUMENT.WPT and DOCUME-1.WPT.

Convert

After all the necessary set ups have been done, the highlight bar moves to the Convert command. Press [Enter] to convert.

The screen will switch to a different mode to show you, which files are being converted, and how much conversion is done so far.

Options

The options menu screen looks like this:

PC-Brother	Brother-PC	Source	Destination	Convert	Options	Exit
Conversion Log▶ Display						
Current Software Settings						
Convert From: WordPerfect 5.0/5.1/Windows				Convert To: Brother WP		
Source: (empty)				AutoSelect:Yes		
Destination: (empty)				Conversion Log:Yes		
↑: Move Choice ENTER: Select Chosen Option ESC: Exit from Window						

Conversion Log

The conversion log menu screen looks like this:

PC-Brother	Brother-PC	Source	Destination	Convert	Options	Exit
						<div> <div>Conversion Log</div> <div>Display</div> </div> <div> <div>Yes</div> <div>No</div> </div>
<div>Current Software Settings</div> <div> <div>Convert From: WordPerfect 5.0/5.1/Windows</div> <div>Convert To: Brother WP</div> <div>Source: (empty)</div> <div>AutoSelect:Yes</div> <div>Destination: (empty)</div> <div>Conversion Log:Yes</div> </div>						
<div>↑: Move Choice ENTER: Select Chosen Option ESC: Exit from Window</div>						

The conversion log is a file that the program creates to record information about the conversion process. It is conceivable that some features in a document cannot be converted because they are not supported by the destination word processor.

The program can record such exceptions in a log file containing an audit trail. The audit trail log file is a simple ASCII text file, which may be reviewed or printed after doing a conversion.

If the log file does not exist when you run the program, it automatically creates it and writes the log into it. If the file already exists, the program appends the new information to the end of the file, leaving the previous information in it intact. Therefore, the log file can accumulate the audit trail over successive conversion sessions.

The log file created will always be named "CONVERT.LOG", and will be saved in the Brother subdirectory.

The log file can be viewed on the screen using the DOS type command. For example:

```
C>TYPE C:\BROTHER\CONVERT.LOG
```

This will display the audit trail on the screen.

Note that for each conversion session, the audit trail records the date and time the conversion was performed, the source and destination word processing formats, and the exception summary results for each file converted.

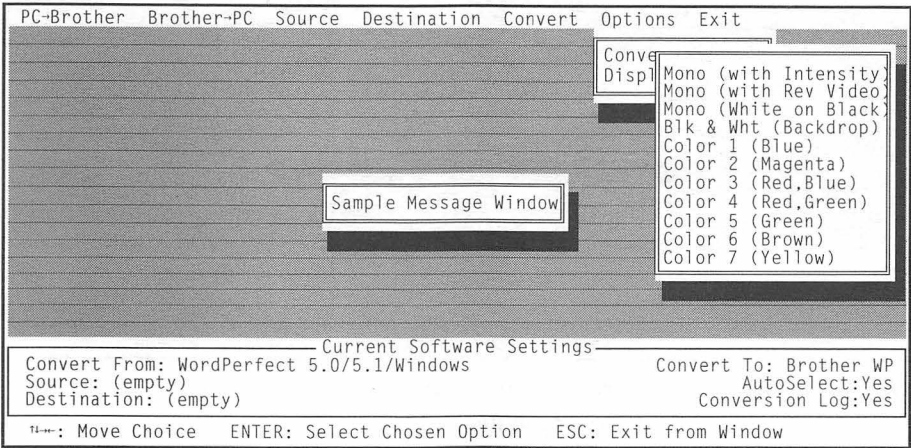
You have the option to allow the program to create the log or not to create it. You may select Yes or No for the Conversion Log feature from the sub-menu.

Display

This option allows you to specify how you like your computer screen to appear. The program allows you to indicate high intensity or reverse video emphasis, and whether you prefer a "black-on-white" or "white-on-black" screen.

If your display monitor supports color, you may also select from any of the color schemes available.

Your display menu screen looks like this:



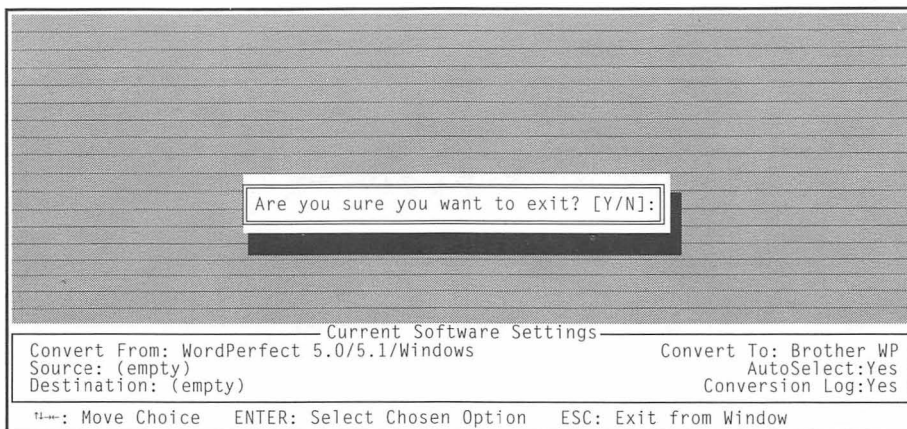
DISK APPLICATION

Move the highlight bar to the scheme of your choice. The color scheme will change to adapt to the new selection. When you find a scheme you like, press [Enter] to select it. Or press [Esc] to leave the original display scheme unchanged.

Exit

You may exit the program whenever you wish to do so. Just move the highlight bar to the Exit choice in the menu and press [Enter].

The program double checks to make sure you really want to exit by displaying the following screen:



The screenshot shows a window titled "Current Software Settings" with a confirmation dialog box in the center. The dialog box asks "Are you sure you want to exit? [Y/N]:". Below the dialog box, the settings are displayed in two columns. At the bottom of the window, there is a status bar with keyboard shortcuts: "F4: Move Choice", "ENTER: Select Chosen Option", and "ESC: Exit from Window".

Current Software Settings	
Convert From: WordPerfect 5.0/5.1/Windows	Convert To: Brother WP
Source: (empty)	AutoSelect:Yes
Destination: (empty)	Conversion Log:Yes

F4: Move Choice ENTER: Select Chosen Option ESC: Exit from Window

Type "Y" and press [Enter] will exit you to DOS.

Type "N" and press [Enter] to stay in the program.

Typical Sequence of Operations

STEP 1

PC → Brother

(From PC to Brother)

This is where you select the PC word Processing format you need to convert from. The files will be converted to Brother format.

OR

Brother → PC

(From Brother to PC)

This is where you select which word processing format your Brother file will be converted to.

DISK APPLICATION

STEP 2

Source

AutoSelect
Drive
Directory
File(s)

This is where you select which file(s) you need to convert, and where those files are located.

STEP 3

Destination

Location
File Name(s)

This is where you select the location your converted files will be saved to.

STEP 4

Convert

This command initiates the conversion process.

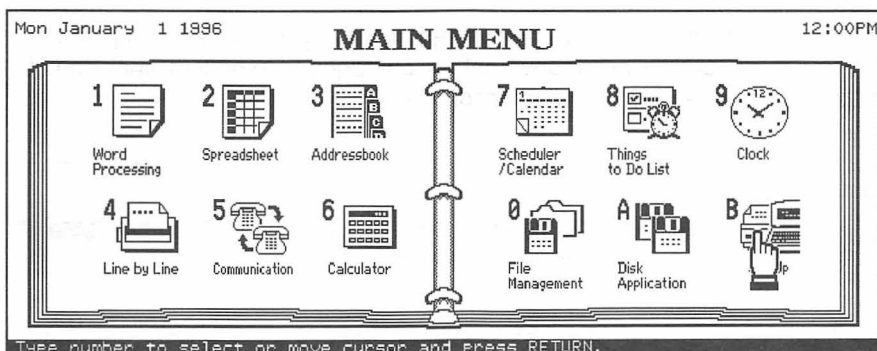
Set Up

The Set Up Mode

The Set Up mode allows you to tell your machine what kind of printer is connected, to set a password, to charge the battery quickly, and to start the demonstration program.

How to Start?

1. Switch the machine on to display the MAIN MENU.

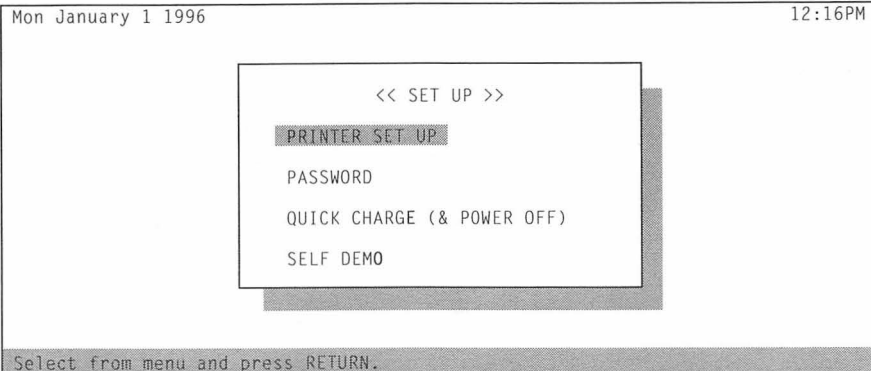


2. Type "B" or move the cursor to B. Set Up using the cursor keys and press **RETURN**. The SET UP screen appears.

How to Finish

Press **CODE** + **MENU** (**FILE**) or press **CANCEL** to return to the MAIN MENU.

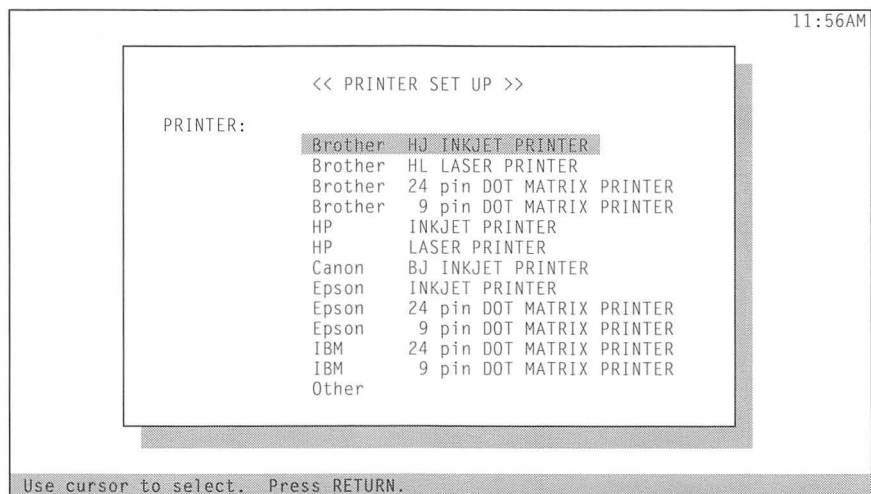
Printer Set Up



You should confirm the printer settings before you try to print anything. Your machine is compatible with many printers, but requires to be told what kind of printer is connected, and on which connector.

Selecting the Printer

1. Use **↑** and **↓** to move the cursor to PRINTER SET UP and press **RETURN**. The first page of PRINTER SET UP screen appears:



2. Use **↑** and **↓** to select the appropriate printer, and press **RETURN** to display the second page of the PRINTER SET UP screen.

The PRINTER setting allows you to choose what is called a printer “driver”. A printer driver is a software interface that processes the data from your files into a “standard” printer format before sending it through the printer cable. Most printers are equipped with one or several “emulations” that will accept and respond to the incoming data at print time.

With its 13 different drivers, your machine is compatible with a wide range of existing and future printers – even printers that are not listed by name on the next table. In order to find the correct match between your machine and your printer, proceed as follows:

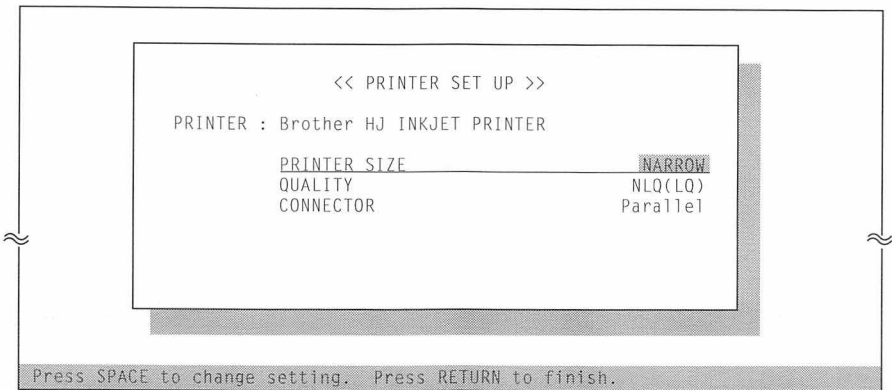
1. If your printer is listed on the PRINTER column of the next table, set PRINTER to the corresponding mode on the MODE column. For example, if you own a Brother HJ-400, set PRINTER to Brother HJ INKJET.
 2. If your printer is not listed on the PRINTER column, consult the printer’s documentation to find out which emulation it is equipped with. Find that emulation on the EMULATION column and set PRINTER to the corresponding mode on the MODE column. If your printer has more than one emulation, it must be switched to one of the emulations listed in the EMULATION column. For example, the Brother HL-1260 Laser Printer includes two emulations (HP LASERJET and BR SCRIPT). HP LASERJET is listed in the EMULATION column. Set PRINTER to Brother HL LASER or HP LASER and select the HP LASERJET emulation on the printer.
- *Depending on your printer, a few characters may not print correctly. The paper may also not feed the expected amount.*
 - *Since it is not possible to check the operation of every printer on the market, some problem may arise with your printer if it does not emulate the named printer exactly.*
 - *When a Brother dot-matrix printer is used, make sure that the emulation is set to the IBM mode. For example, the XL500 has two emulation modes (IBM and EPSON), although only the default setting is shown on the above table. If the printer happens to be in EPSON mode, be sure to reset it to the IBM mode before printing.*
 - *Brother 9 pin mode is the default setting for M1724L/XL2000. Select the EPSON emulation mode if you want to use these printers in 24 pin mode.*
 - *With some printers, the amount of paper advance when a sheet is inserted may be slightly wrong. This problem can be corrected by changing the paper size in the Word Processing mode. For details, see “Paper Size” on page 76.*
 - *Some characters may not print correctly if you select the micron pitch (PITCH:15).*
 - *If the printer that you own does not appear on the list, select Other. You will be able to print only basic text (no bold, underline, super/sub scripts, etc.).*
 - *When using a Brother MFC, select Brother the HL LASER mode, and use a CDCC printer cable to connect the printer to the parallel connector of your machine.*

Selecting the correct PRINTER mode

MODE	EMULATION	PRINTER
Brother HJ INKJET	EPSON LQ SERIES (ESC/P)	HJ-400
Brother HL LASER	HP LASERJET IIP/IV (PCL4/PCL5E)	HL-600 SERIES HL-1200 SERIES HL-10 SERIES HL-4/6/8/10 MFC-1850MC/1950MC MFC-3900ML/4000ML 4400ML MFC-4500ML/5500ML 5550ML
Brother 24 pin DOT	IBM PROPRINTER XL24E (24 pin)	XL-1500 M1324/1824
Brother 9 pin DOT	IBM PROPRINTER XL (9 pin)	M1209/1309/1709 XL500/100
HP INKJET	HP DESKJET (PCL3)	HP DESKJET 320/500/540
HP LASER	HP LASERJET IIP/IV (PCL4/5E)	LASERJET 4L/4P/4+
Canon BJ INKJET	IBM PROPRINTER XL24E	BJ100/200 BJC4000
Epson INKJET	EPSON LQ SERIES (ESC/P)	STYLUS 300/800+
Epson 24 pin DOT	EPSON LQ SERIES (ESC/P)	LQ510/850 KX-P1124/2123
Epson 9 pin DOT	EPSON FX SERIES	FX810/850 KX-P1180
IBM 24 pin DOT	IBM PROPRINTER XL24E (24 pin)	IBM PROPRINTER XL24E HJ-100
IBM 9 pin DOT	IBM PROPRINTER XL (9 pin)	IBM PROPRINTER XL
Other	TTY (without backspace)	

Setting the Printer Parameters

Press **RETURN** on the first page of the PRINTER SET UP screen. A second SETUP screen appears.

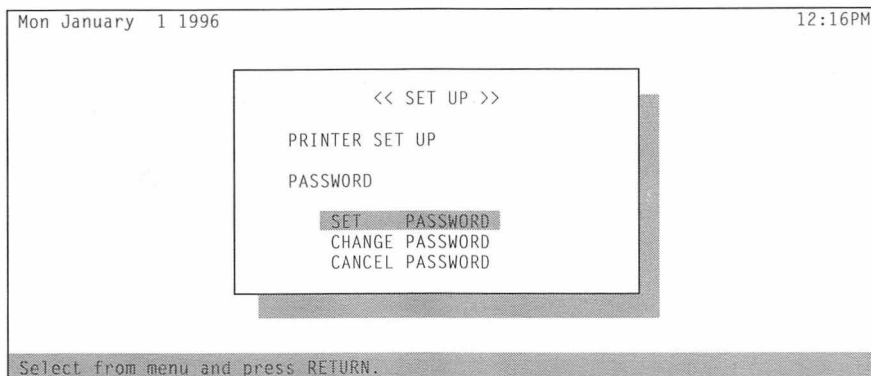


1. Use **↑** and **↓** to select a parameter, and press **(SPACE BAR)** to set the value.
2. Press **RETURN** to register your settings and to return to the MAIN MENU, or **CANCEL** to restore the old setting and return to the first page of the PRINTER SET UP screen.

Printer parameters

Parameter	Options
PRINTER SIZE	NARROW WIDE
QUALITY	NLQ(LQ) (Near Letter Quality) DRAFT
CONNECTOR	Parallel (printer connector) Serial (communication connector)
When SERIAL is selected	
BAUD RATE	300, 600, 1200, 2400, 4800, 9600
PARITY	None, Odd, Even
DATA BITS	8bits, 7bits
STOP BITS	1bit, 2bits

Password



SET UP

If you set a password, nobody will be able to read or modify your data. Any time a mode other than Clock, Type, or Calculator is selected from the MAIN MENU, the machine will ask for the password and deny access if the password is not correct.

- While entering a password, use **BS**, **CODE** + **0** (**W OUT**), **CODE** + **=** (**L OUT**), **CODE** + **←** (**EXPR**), or **CODE** + **→** (**RELOC**) to edit.
- 1. Press **CODE** + **SHIFT** + **K** to display the PASSWORD submenu.

The three options of the submenu are used as follows:

- **SET PASSWORD:** For setting your first password. This option cannot be used to replace an old password with a new one.
- **CHANGE PASSWORD:** For replacing an old password with a new one. This option cannot be used if no password has been previously entered.
- **CANCEL PASSWORD:** For cancelling the password.

To Set a Password

1. Use **↑** and **↓** to select SET PASSWORD and press **RETURN**. The machine asks you to enter the password.
2. Type the password using only standard English alphabet characters and press **RETURN** to enter the password, or **CANCEL** to quit.

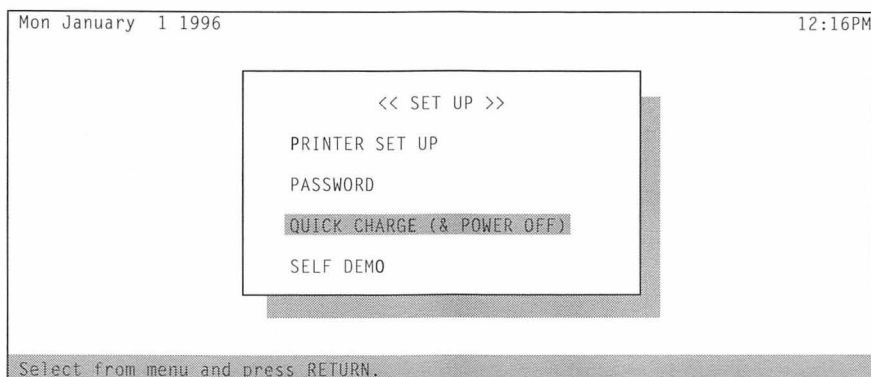
To Change a Password

1. Use **↑** and **↓** to select CHANGE PASSWORD and press **RETURN**. The machine asks you to enter the old password.
2. Type the current password and press **RETURN**. The machine asks you to enter a new password.
3. Type the new password and press **RETURN**.

To Cancel a Password

1. Use **↑** and **↓** to select CANCEL PASSWORD and press **RETURN**. The machine asks you to enter the current password.
 2. Type the current password and press **RETURN**. The current password is canceled.
- *Each time you are requested to enter the password, press **CODE** + **SHIFT** + **P** to display the password. This feature ensures that you can use your machine even if you forget your password. **It also means that any owner of the same model Brother machine knows how to determine your password.***

The Quick Charge Function



To charge the battery quickly, you can use the quick charge function. The battery will recharge in about six hours. However, the charging time may vary depending on the temperature and AC voltage. Before you start charging, make sure that the AC adapter is connected and the battery is installed.

1. Use **↑** and **↓** to move the cursor to QUICK CHARGE(& POWER OFF). and press **RETURN**. This message will appear:

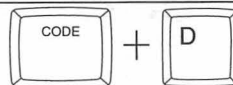
Press RETURN to turn POWER OFF and charge quickly.

- **Short cut:** Instead of (1), press **CODE** + **E** on the MAIN MENU screen.
2. Press **RETURN** to start charging, and immediately turn the power off.
- *If you turn the power on while the battery is charging, the quick charge function is interrupted and the MAIN MENU appears.*
 - *If the AC adapter is not connected or the battery pack is not inserted in its compartment, this message appears:*

AC adapter or Battery does not exist. Press CANCEL to display MAIN MENU.

Press **CANCEL** to return to the MAIN MENU. You must then turn the power off. Connect the AC adapter or insert the battery pack as necessary, and restart the above procedure.

Self-Demonstration



This self-demo program shows you examples of what you will be able to do with your Super PowerNote.

1. Use **↑** and **↓** to move the cursor to SELF DEMO and press **RETURN**.
- **Short cut:** Instead of (1), press **CODE** + **D** on the MAIN MENU screen.
2. After the files are saved or deleted, the Self-Demo starts and this message appears:

Press RETURN for next screen, CANCEL for first screen, CODE+FILE for MAIN MENU.

3. Press **RETURN** or wait for a few seconds to see the next screen, **CANCEL** to go back to the first screen, or **CODE** + **MENU** (**FILE**) to quit. The last page will show this message:

Please set printer and press CODE + PRINT so that I may print out a copy of my presentation for you, or press CANCEL to re-start the demonstration.
Press CODE+FILE for MAIN MENU.

4. Press **CANCEL** to re-start from the first page, **CODE** + **FILE** to return to the MAIN MENU, or, if you want to print, set the printer and press **CODE** + **PRINT** (**P**). After printing is complete, a graphic demonstration starts on the screen and this message appears:

Press RETURN to start demonstration or CODE+FILE for MAIN MENU.

5. Press **RETURN** to re-start the Self-Demo. Press **CANCEL** or **CODE** + **FILE** to return to the MAIN MENU.

Appendix

Error Messages

Error Message or Indicator	Cause	Remedy
BATTERY	The rechargeable battery is low.	Recharge as soon as possible.
Battery low. Can't use Disk Drive.	The rechargeable battery is low.	You can still use the machine for a while, but the disk drive cannot be accessed. Recharge as soon as possible.
Check disk.	Malfunction of the diskette or disk drive.	Consult your dealer.
Disk is write protected. Release the protection and press RETURN to retry.	You are using a write-protected diskette.	Use another diskette or disengage the protection.
Incorrect disk. Insert another and press RETURN.	The selected file cannot be found on the inserted diskette (you changed the diskette so that the DISK INDEX screen and the inserted diskette do not match).	Press CANCEL or reinsert the correct diskette and press RETURN .
Incorrect format type or damaged diskette. Press CANCEL.	Defective diskette	Consult your dealer.
	You attempted to copy an uninitialized source diskette.	Initialize the diskette. (This will erase any files previously stored on the diskette.)

Error Message or Indicator	Cause	Remedy
Insert disk and press RETURN.	The diskette is not inserted when you start a read operation, or the diskette is removed during read or write operation (a message was telling you to wait).	Insert the diskette and press RETURN . In the future, please avoid removing or inserting a diskette while prompted to wait.
Memory full.	You attempted an operation that would require more memory than available.	Delete some of the files to make more free room. Refer to "Specifications" on page 322 for the maximum file size for each application.
MemLoss	The lithium battery is low.	Save all your files on diskette and change the lithium battery as soon as possible.
Ram down.	Malfunction detected in your machine's Random Access Memory.	Consult your dealer immediately.
Rom down.	Malfunction detected in your machine's Read Only Memory.	Consult your dealer immediately.
Unidentified disk error. Insert another and press RETURN.	In the Word Processing mode: you are trying to load a User Dictionary or an Abbreviation Phrase file from a disk that is unformatted or damaged. In the Addressbook mode: you are trying to save selected record on disk that is unformatted or damaged.	If the disk is not yet formatted for this machine, format it (this will erase all data it might contain). If you cannot solve the problem, consult your dealer.

Troubleshooting Chart

Your unit has been precision-manufactured to give you years of trouble-free use. In the rare case that trouble does happen, you will probably be able to find the solution in the table below. If you cannot, please do not attempt to repair the machine yourself. Instead, please contact your dealer.

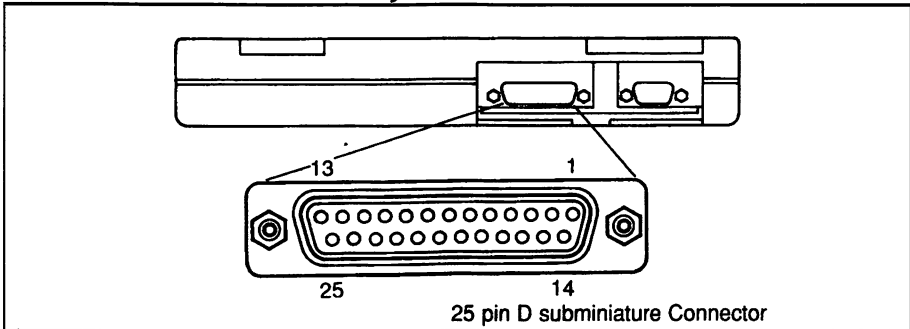
Trouble	Remedy
Nothing works after the machine has been switched on.	Check that the AC Adapter cord is correctly connected.
Will not print or printout is difficult to read.	Check the printer connections and settings, and whether the printer is ON LINE.
All seems normal after the machine has been switched on, but nothing is displayed.	Adjust the contrast controller.
Disk operation is not possible.	If you are running the machine on the rechargeable battery, the battery may be low. The diskette has been damaged, or a television set is located too close to the disk drive. Try with another diskette and/or move the unit. The diskette may be an "1DD" diskette, use "2HD" or "2DD" diskettes only.

Specifications

General

Display	LCD, 22 lines x 80 characters
Keyboard	59 keys Auto repeat function 2 selectable character sets
Memory Internal (User's area) External	63K bytes 1.44M or 720K bytes (formatted) 3.5" diskette
File Size for each Application Word Processing Files User Dictionary Size Abbreviated Phrases Spreadsheet Files Addressbook Files Scheduler Size Thing to Do Size	Max. 32K 204 words (7-character average length) Max. 30 phrases Max. 15K Max. 12K 31 days 37 records
Power Supply	AC Adapter (AC120V/DC9V), (AC220-240V/DC9V) or optional rechargeable Ni-Cd Battery Battery recharge time: 6 hours (quick) 15 hours (normal) Battery life: approximately 8 hours, depending on the temperature.
Memory Backup Battery	Lithium Battery life: 1 year (at room temperature)
Weight Dimensions	4.8lbs (without rechargeable battery) 11.2" (W) x 1.9" (H) x 9.7" (D)
Interface	RS232C connector x 1 Parallel connector x 1

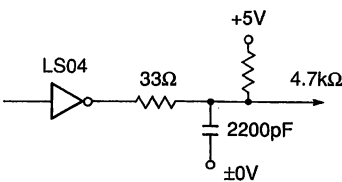
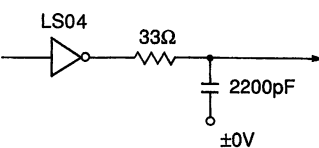
Printer (Parallel) Interface



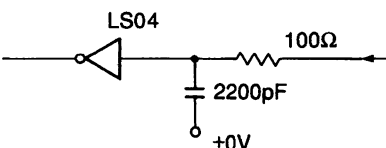
Signal Interface Pin-Assignment

Pin No.	Signal Name	Input/Output
1	Data Strobe	Output
2	Data 1	Output
3	Data 2	Output
4	Data 3	Output
5	Data 4	Output
6	Data 5	Output
7	Data 6	Output
8	Data 7	Output
9	Data 8	Output
10	Not Connected	
11	Busy	Input
12	Not Connected	
13	Select	Input
14	AUTO FEED XT	Output
15	Not Connected	
16	Input Prime	Output
17~25	Ground	

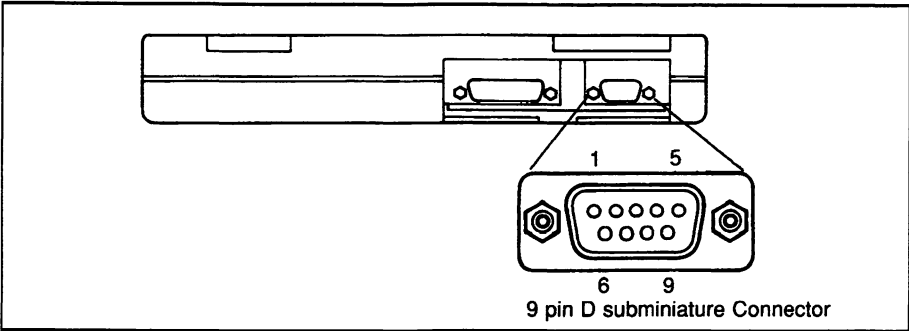
Driver Circuit

Signal	Configuration
Data Strobe ($\overline{\text{STROBE}}$)	
Data 1~8 (D0~D7)	

Receiver Circuit

Signal	Configuration
BUSY Select (SLCT)	

Communication (RS-232C) Interface



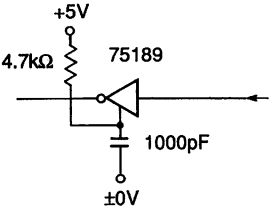
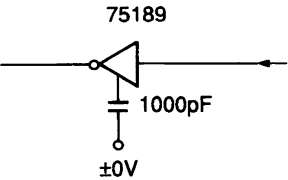
Signal Interface Pin-Assignment

Pin No.	Signal Name	Input/Output
1	Carrier Detection (CD)	Input
2	Reception Data (RxD)	Input
3	Transmission Data (TxD)	Output
4	Data Terminal Ready (DTR)	Output
5	Signal Ground (SG)	
6	Data Set Ready (DSR)	Input
7	Request To Send (RTS)	Output
8	Clear To Send (CTS)	Input
9	Not connected	
E (Shell)	Frame Ground (FG)	




Driver Circuit

Signal	Configuration
Transmission Data (TxD) Data Terminal Ready (DTR) Request To Send (RTS)	

Receiver Circuit

Signal	Configuration
Carrier Detection (CD) Data Set Ready (DSR) Clear To Send (CTS)	
Reception Data (RxD)	

Glossary

ABBREVIATED PHRASE	To increase your typing speed, you can store frequently used phrases in a special abbreviated phrase file and recall any text string by merely typing its abbreviation (which has been stored along with the string).
ACCELERATOR	Instead of selecting a function from a menu with  or  and then pressing  to activate the function or to display a submenu, press the letter keys that appear in bold on the menu. This character is called an accelerator.
ADDRESSBOOK	The Addressbook mode is used to create and edit lists of names, addresses, telephone numbers, etc. The data of an Addressbook file can be merged in a text file during printing. If the data contains telephone numbers, these can be used for automatic dialing in the COMMUNICATION mode.
ALARM	The machine allows you to set three different alarms from the Clock mode (morning alarm, for example), and to remind you about important schedules (five alarms in the Scheduler/Calendar mode and five alarms in the Thing to do List mode).
BACKUP BATTERY	The internal memory of the machine is protected by a small, long-life lithium battery. If the battery is removed or becomes low, the contents of the memory will be erased. Therefore, we suggest that you transfer regularly your data from the memory to diskettes.
BLOCK OPERATIONS	The block operations on the Word Processing mode allow for on-screen cutting & pasting tasks. They include block copy, move and delete.
CALCULATOR	A screen that looks like a pocket calculator can be activated from the MAIN MENU or from the Word Processing mode. You can carry out simple arithmetic problems and insert the result in your text file, if desired.

CLOCK	The machine is equipped with a time clock powered by the lithium battery. Once the clock is set, it will display the date and time on the first line of most screens. A clock screen is also available which permanently displays the time in large characters. A WORLD TIME function allows you to display the time of other cities in the world.
COMMUNICATION	The Communication mode is used to transmit and receive files between two Super PowerNote or a Super PowerNote and a personal computer. It also allows you to create a file to execute log-in for accessing CompuServe. This communication is handled via a cable connected between two units or through a telephone line and a modem hook-up.
DATA MERGE	An advanced function which allows you to automatically print many copies of a document (a letter, for example) using variable data (names and addresses) stored in a separate ADDRESSBOOK file.
DIALING	This machine performs automatic dialing in the Communication mode, which means that you do not have to manually dial on the telephone set. The telephone number is input directly on the screen, or selected from the Addressbook file.
DISPLAY	The LCD display shows the setting indicators, the text you are typing, function menus, and messages.
DOUBLE COLUMNS PRINTING	This function allows you to print your document in two columns. On the screen, the text is displayed continuously as one column.
DUAL SCREEN	This function splits the display in half and allows you to work simultaneously with two documents.
EDITING	Editing a file means modifying it.
ELITE	One of the available pitches on this machine. Elite pitch corresponds to 12 characters per inch.
FOOTER	A footer is a line of text that is printed automatically at the bottom of each page. With this machine, the footer includes automatic page numbering.

FORMULA	In the Spreadsheet mode, you may input data in order to automatically perform a mathematical operation.
FUNCTION MENU	A listing of available operations that can be performed. By pressing the MENU key, you may choose an operation available for the selected mode.
HEADER	A header is a line of text that is printed automatically at the top of each page. With this machine, the header includes automatic page numbering.
HYPHEN SCAN	The hyphen scan function detects the lines of the document with too many blank spaces and helps you insert hyphens in order to improve the layout.
INSERT DATE	This function inserts the current date into a document file.
INSERT TIME	This function inserts the local time into a document file.
JUSTIFICATION	When a line is printed in justify mode, the machine divides the total length of the line, minus the length of the actual characters, by the number of spaces between words to obtain equal spacing between words. The first character of the line is aligned with the left margin, and the last one with the right margin.
LINE OUT	The LINE OUT function allows you to quickly erase the current line, from the cursor position to the beginning of the line.
LIST PRINT	This function allows you to print a list of the file stored in the memory or on a diskette.
MEMORY	A special part of the machine where data can be stored. An electronic memory is divided into small units called "bytes" where a single character can be stored. See also RAM and ROM.
MICRON	One of the available pitches on this machine. Micron pitch corresponds to 15 characters per inch.
MODEM	A MODEM (MODulator/DEModulator) is a device used to convert data from a form which is compatible with a data processing machine to a form that is compatible with a transmission device, and vice-versa.

PAGE LAYOUT VIEW	The page layout view function of this machine allows you to preview several pages on the screen by compressing the size of the characters. On that screen, you are not able to read your text, but you have a global view of your document.
PICA	One of the available pitches on this machine. Pica pitch corresponds to 10 characters per inch.
PROTOCOL	A set of conventions between communicating devices regarding the format and contents of messages to be exchanged. This machine can use the popular XMODEM protocol.
RAM	Random Access Memory – a memory you can store in or recall from. All the information you input from the keyboard is stored in this type of memory. The RAM is protected by a small lithium battery.
RANGE	A range of cells is a portion of the spreadsheet that is enclosed in a rectangle. Many functions, such as move, copy, delete, and print can be applied to a range.
RECALCULATION	In the Spreadsheet mode, a result which is related to other cells through a formula can be recalculated if the contents of the cells have been modified. Since recalculation of a large spreadsheet is time consuming, the machine lets you edit without recalculating automatically each time you edit a cell. Recalculation is carried out only when you activate the function.
RECORD	A record is an entry of the Addressbook. It may contain different items but must fit on a single line.
REDUNDANCY CHECK	Redundancy check is a function of the Spell Checker. It detects repeated words.
ROM	Read Only Memory. This kind of memory is where the manufacturer stored the software of this machine. This permanent memory is not cleared when you turn the power off.
SCHEDULER / CALENDAR	The Scheduler/Calendar mode is used to organize your schedule. It is equipped with an alarm function and an electronic calendar.

SEARCH & REPLACE	The search and replace function automatically scans the document and stops at each occurrence of a specified word. It allows for easy replacement of a word.
SET UP	The Set Up mode is used to select the printer, to set a password, to charge the battery quickly, and to start the demonstration program.
SHORT-CUT KEYS	Keys that are used to activate a function quickly, without displaying the function menu.
SPELL CHECKER	The spell checker function automatically checks your text and warns you when a mistake is detected (misspelled or redundant word).
SPREADSHEET	The Spreadsheet mode allows you to create files containing numbers to be calculated. Calculation is performed automatically. This mode is ideal to create files like financial reports, balance sheets, check books, pay lists, etc.
THESAURUS	The Thesaurus function allows for easy replacement of words with synonyms.
THINGS TO DO LIST	This mode allows you to keep a list of things to do.
WORD OUT	The WORD OUT function allows you to quickly erase the word the cursor is on, from the current position to the beginning of the word.
WORD PROCESSING	The Word Processing mode allows you to create and edit documents such as letters, reports, chapters of a book, etc.
WORD WRAP	When displaying or printing a file, a word that cannot fit on a line is automatically “wrapped” to the next line.

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